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ABSTRACT

In recent years academic and government circles in many foreign countries have focused more attention on education in Japan. This report is a translation of a publication intended to inform the general public of educational standards in this country as compared with other selected countries--the U.S., U.K., France, the Federal Republic of Germany and the U.S.S.R. Both quantitative and qualitative aspects of education are considered in this comparative study. Educational expansion, educational methods and contents, conditions for teachers, facilities and other physical conditions and educational expenditures are discussed. Consideration is given to both the reaction of education to the rapid social changes of the 1960's and to the central problems of education which are likely to occur in the future. (SHM)

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EDUCATIONAL STANDARDS IN JAPAN

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The 1970 "White Paper on Education"

EDUCATIONAL STANDARDS IN JAPAN

March 1971

MINISTRY OF EDUCATION, GOVERNMENT OF JAPAN

PREFACE TO THE ENGLISH VERSION

In November 1970, the Japanese Ministry of Education published a report entitled "Educational Standards in Japan". This publication was intended to inform the general public of educational standards in this country as compared with other selected countries. It attempted a comparative study of education both in its quantitative and qualitative aspects. The present volume is a complete translation of this report.

In recent years academic and government circles in many foreign countries have focused more attention on education in Japan. There has been great demand for more factual information written in English relating to the educational scene as a whole in this country. In order to meet this demand, this English version of the report has been prepared and published. It is hoped that it will be of use and value to those who are interested in education in Japan.

Gratitude is expressed to Mr. T. J. Pempel, Ph. D. candidate in political science at Columbia University, who has reviewed and amended the English version of this publication.

March, 1971

Kikuo Nishida

Kikuo Nishida
Director of Planning and Research
Minister's Secretariat
Ministry of Education

PREFACE TO THE ORIGINAL VERSION

Today enthusiasm for education in various countries in the world is high. In Japan efforts have been made for many years to expand and improve education. Especially in regard to its universality, education in Japan has already reached a high standard. Socio-economic development, however, has been extensive recently and consequently when the problems raised by such development are taken into account it is obviously necessary to take steps to further improve education.

Therefore, during this Week for Education and Culture it is of significance that we study the facts of education in comparison with other major countries, and make clear the standards of education in our country.

I should be pleased if this book would be useful not only for the educators concerned but also for all of the people so they may comprehend the present situation and consider the future development of our education.

November, 1970

Michita Sakata
Minister of Education

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INTRODUCTION

This third edition of *Educational Standards in Japan* which follows the editions of 1959 and 1964, has been compiled to clarify contemporary educational standards in Japan in comparison with the past and at the same time in comparison with conditions in the U. S. A., U. K., France, the Federal Republic of Germany and the U. S. S. R. Educational expansion, educational methods and contents, conditions for teachers, facilities and other physical conditions and educational expenditures will be considered.

In providing an overview of these items, attention will be paid to maintaining continuity with the two previously published editions and also to the various questions pointed out in the reports of the Central Council for Education on educational reform. This is based on the understanding that consideration should be given to both the reaction of education to the rapid social changes of the 1960's, and to the central problems of education likely to occur in the future. The following aspects were particularly taken into account.

One was the concept of life-long education. Various questions have been considered in fields outside school education with the belief that education should be continued not only within schools but throughout life.

Second, we considered education able to meet the needs of individual development and individual aptitudes. The quantitative expansion of education has to a considerable degree already been achieved, and now emphasis on quality must be considered. Therefore, an attempt was made to review the contents and methods of education from the viewpoint of developing individual abilities and taking account of individual apptitudes. We have also considered the extent to which educational contents and methods are equipped to lead students to learn on their own initiative.

A third consideration was the cultivation of humanity. The technological innovations of today's world raise questions regarding the loss of humanity in the face of technological advances and information flow, and give rise to such problems as environmental disasters and centralization of population, creating population shortages in other areas. Therefore the problem of improving the educational environment has been positively considered.

The editor hopes that the book may be a useful source in discussing educational developments in Japan especially in relation to the movement and trends of educational developments in the major countries in the world.

CHAPTER I. EXPANSION OF EDUCATIONAL OPPORTUNITIES

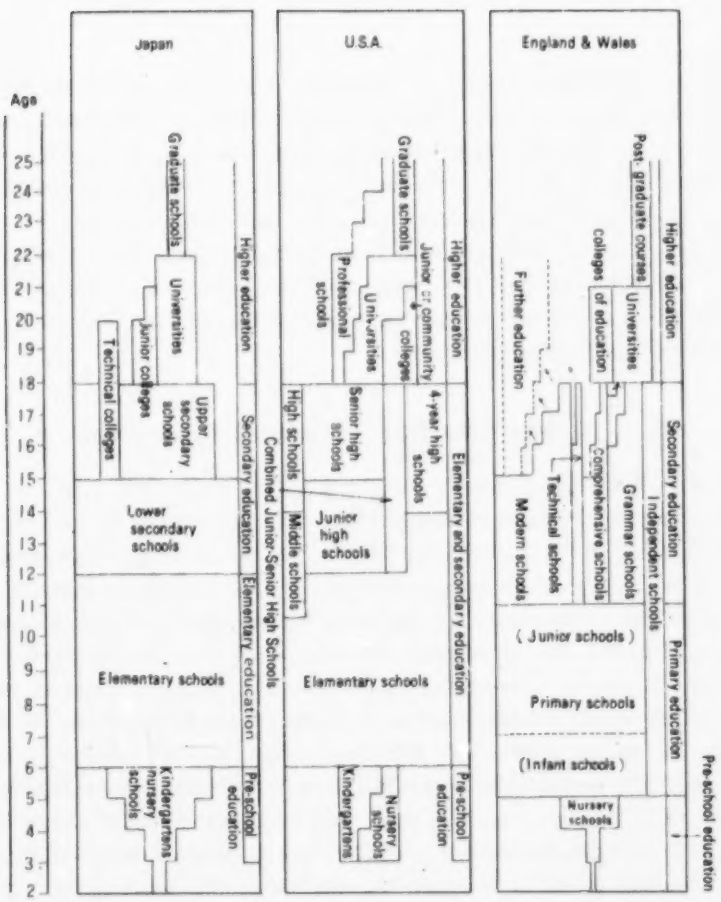
Educational opportunities are provided in various forms all through life from infancy to old age in homes, schools and society. Schools, however, are the main educational institutions which provide these opportunities systematically and with definite objectives. Therefore, the quantitative extent to which people are provided with opportunities for school and other formal education, i.e., enrollment in these formal institutions, will give us a rough picture of the extent of educational expansion in our country. This chapter aims at elucidating the present quantitative expansion of schools and other formal education in comparison with the past and with some other major countries.

1. The Structure of School Education

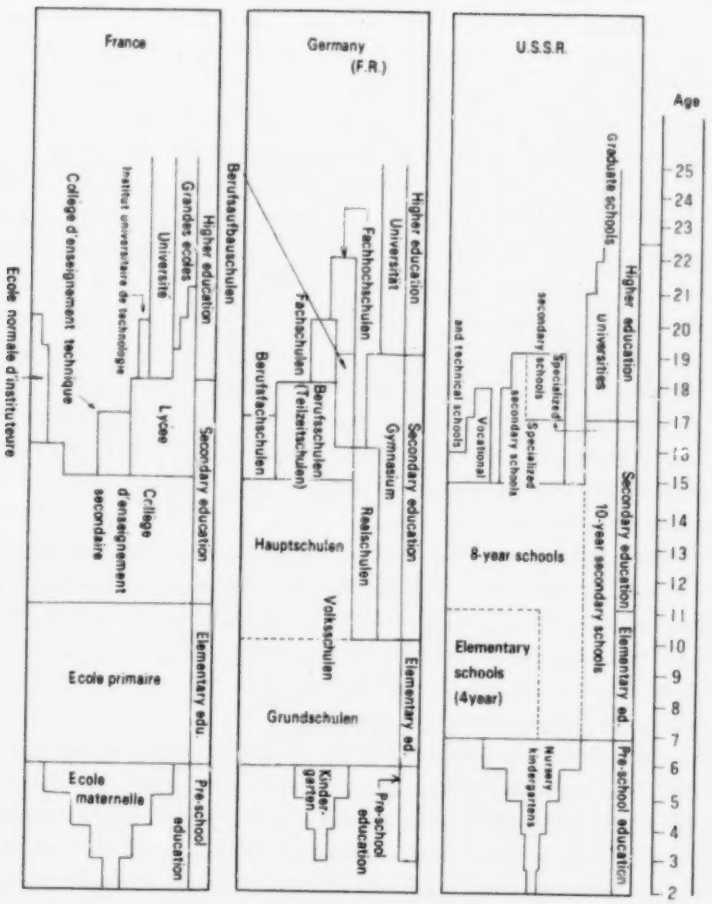
After World War II, schools shifted to a 6-3-3-4 "single-track" system, in order to equalize educational opportunities. Under this new system, we have attained, during the quarter of a century since the end of the war, a high status among the advanced countries of the world in terms of educational expansion. In recent years, however, the necessity for reappraising the existing system has been increasingly voiced with the aim of realizing the basic ideal of equal educational opportunities as well as meeting the requirements of a modern industrial society. One of the biggest problems has been providing educational institutions which can meet the diverse abilities and aptitudes of those who are going on to upper secondary educational institutions in increasing numbers every year. In light of this, technical colleges were established in 1962 to provide lower secondary school graduates with five consecutive years of technical education. Moreover, there has recently been a need to reappraise the structure of the school system from the point of pupils' development.

In the United States of America, a single-track system has been practiced since the latter half of the nineteenth century. The structure of elementary and secondary schools, however, differs from one community to another. There are 8-4 plans, 6-6 plans and 6-3-3 plans. In recent years, such new practices as 5-3-4 plans

Figure 1. School Systems



in Various Major Countries



and 4-4-4 plans have been developed to adjust the school structure more adequately to the development of pupils. Higher education is usually provided by four-year universities and two-year junior colleges. Recently, two-year junior or community colleges have been increasing, especially for the purpose of providing secondary school graduates with wider opportunities for higher education. Junior colleges have traditionally functioned as both lower stage institutions of higher education and institutions of vocational education. In recent years, however, with the increasing proportion of those going on to higher educational institutions, vocational education suited to the needs of communities has been stressed.

In European countries, school systems developed on the "multi-track" basis. After completing elementary education, pupils have been divided into two groups, those who go on to institutions of higher education and those who go on to vocational schools or enter employment. Recently, however, there has been a marked movement toward the "single-track" system and so barriers between different types of schools at the secondary level are being increasingly removed.

In England and Wales the abolition of eleven-plus examinations and the reorganization of secondary schools into comprehensive schools have been attempted in some parts of the country since 1965, so as to defer the time for dividing pupils into college preparatory and vocational courses until the stage of upper secondary education.

In France, deferring the time of diversifying courses until the upper secondary education stage has been attempted since 1964 by reorganizing the lower secondary stage into comprehensive schools which offer the same curriculum to all pupils.

The Federal Republic of Germany is also making efforts to defer the time of diversification by introducing observation periods into the lower stage of secondary education, which had previously been diversified.

The school structure of the U.S.S.R. is based on a single-track system. Unlike European countries, however, there are three different patterns according to the characteristics of the locality: in rural areas, 4-year schools form the basis of the school system, while in urban areas, the bases are either 8-year or 10-year schools. At the upper secondary stage, pupils enter either of two types of institutions, i.e., educational institutions mainly designed for those who want to go on to universities (ninth and tenth grades of the ten-year school) and vocational educational institutions of a terminal nature (specialized secondary schools, and vocational and technical schools). In recent years, attempts have been made toward diversifying the former.

The foregoing analysis shows that in those countries in which single-track systems have been in force, such as Japan, the U.S.A. and the U.S.S.R., there is a tendency toward diversifying education beyond the lower secondary stage, while in European countries where multi-track systems were developed, the tendency is toward single-track systems.

As a result of the expansion of upper secondary education, however, the expansion of opportunities for higher education has become a great problem. This has led all these countries to take measures to reform their systems of higher education or to expand their accomodation capacities.

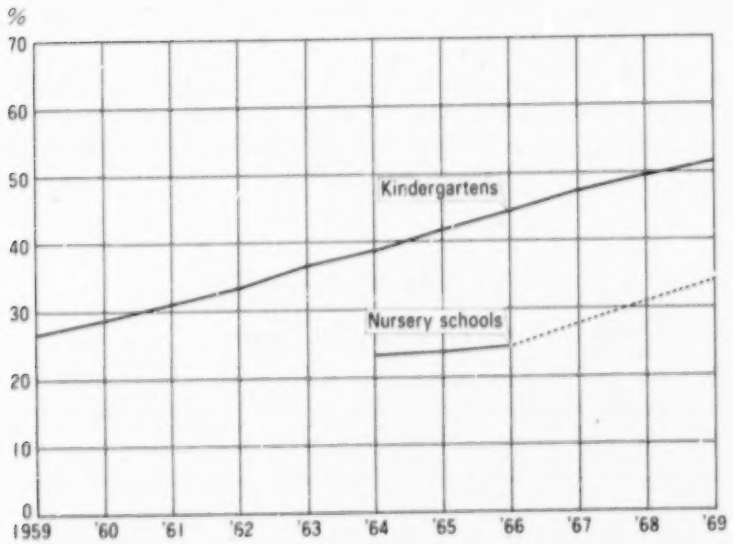
2. Pre-School Education

(1) Quantitative Status of Pre-School Education

The major facilities for infants in Japan are kindergartens and nursery schools. In recent years, with the increasing interest of parents in the care and education of their children, kindergartens and nursery schools have increased markedly in number. In 1969, the number of children three years old and over who were enrolled in kindergartens and nursery schools reached 1,550,000 and 963,000, respectively. Enrollments in kindergartens had increased by approximately 500,000 from 1964 and enrollments in nursery schools by approximately 200,000.

The proportion of the first graders in 1969 who had received kindergarten education when they were five years old was 51.8%. This proportion has increased steadily each year. Although the figures are not exactly comparable with those for kindergartens, in 1969 the proportion of first grade pupils who had been enrolled in nursery schools for not less than six months from infancy up to the time of entrance into elementary schools was 33.4%. The proportions of children of three years old and four years old who were enrolled in kindergartens were 4% and 36%, respectively in 1969. The corresponding proportions in 1966 had been 3% and 28%. Enrollment ratios in kindergartens, however, are widely different from prefecture to prefecture, ranging from a high of 84.3% to a low of 14.2%, the difference being about 70%.

Figure 2. Trends in Enrollment Ratios of Kindergartens and Nursery Schools, 1959–1969



Note: Actual numbers are given in Basic Table 1.

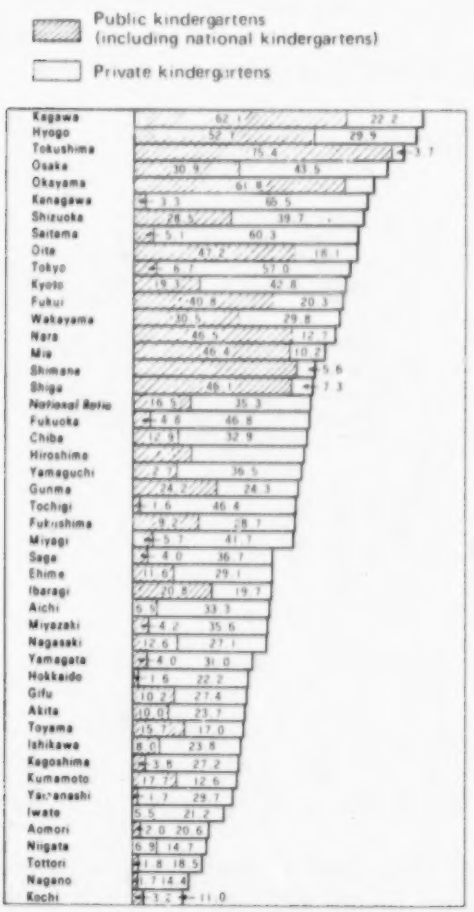
$$\text{Enrollment ratios in kindergartens} = \frac{\text{Pupils who have attended kindergartens}}{\text{First grade pupils}} \times 100$$

$$\text{Enrollment ratios in nursery schools} = \frac{\text{Pupils who have been enrolled in nursery schools for not less than 6 months during the year prior to entrance into elementary schools}}{\text{First grade pupils}} \times 100$$

The enrollment ratios in nursery schools for 1969, shows the proportion of first grade pupils who had been enrolled in nursery school for not less than six months from infancy up to the time of entrance into elementary schools.

The provision of public and private kindergartens is also greatly different from one prefecture to another. Prefectures having financially disadvantaged municipalities are generally less advanced in providing public kindergartens, while in prefectures with major urban areas, such as Tokyo and Kanagawa, private kindergartens are more universal.

Figure 3. Enrollment Ratios in Kindergartens by Prefecture, 1969

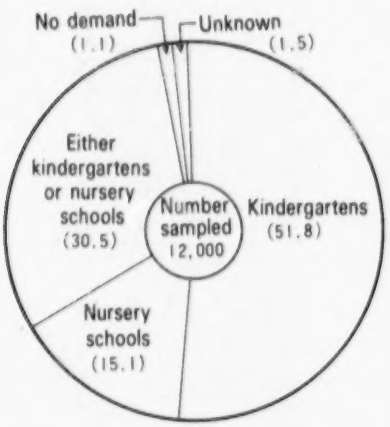


Note: Actual numbers are given in Basic Table 2.

(2) Social Demand for Pre-School Education

The survey on pre-school education conducted by the Ministry of Education in 1970 reveals that 52% of parents want their children to attend kindergartens, 15% nursery schools and 31% either kindergartens or nursery schools.

Figure 4. Social Demand for Pre-School Education by Types of Institutions



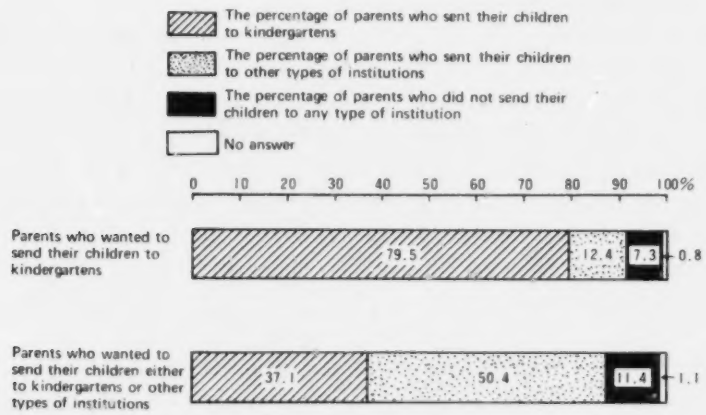
Note: Actual numbers are given in Basic Table 3.

Due to the lack of facilities, of those who wanted their children to attend kindergartens, only 80% succeeded. Of those who wanted their children to be enrolled either in kindergartens or other types of institutions, 11% were unsuccessful.

In areas where the provision of kindergartens was insufficient, (i.e. where enrollment ratios were less than 40%), only 37% of those parents who wanted to send their children to kindergartens were actually able to do so.

Of those parents who did not send their children to any type of institution despite their aspirations, 75% cited "lack of facilities within accessible distance", 15% "high cost" and 9% "insufficient capacity of accomodation" as the reason.

Figure 5. Demand for and Provision of Institutions of Pre-School Education


The percentage of parents who sent their children to kindergartens
The percentage of parents who sent their children to other types of institutions
The percentage of parents who did not send their children to any type of institution
No answer
0 10 20 30 40 50 60 70 80 90 100%
Parents who wanted to send their children to kindergartens
79.5
12.4
7.3
0.8
Parents who wanted to send their children either to kindergartens or other types of institutions
37.1
50.4
11.4
1.1

Note: Actual numbers are given in Basic Table 3.

(3) International Comparison

In the U.S.A., England and Wales and West Germany, as in Japan, pre-school education is provided in two types of functionally different institutions, i.e. kindergartens and nursery schools. (In England and Wales institutions usually called kindergartens are called nursery schools). In France, kindergartens perform the functions of both types of institution. In the U.S.S.R., nursery schools designed for children between two months and three years of age and kindergartens designed for children of three to six years of age from unified pre-school educational institutions called "nursery school-kindergartens."

Institutions of pre-school education are under the supervision of two kinds of authorities in the U.S.A. and England and Wales: state education authorities and welfare authorities in the former, and the Department of Education and Science and the Department of Health in the latter. On the other hand, in the Federal Republic of Germany supervision is under one authority, the Department of Social Welfare. In the U.S.S.R. also, one authority, the Ministry of Education, supervises the instructional activities in pre-school educational institutions. In the United Kingdom, however, there is a movement toward shifting the supervision of education for children of three years of age and over to the Department of

Education and Science. Moreover, in West Germany, where pre-school education has been provided as part of social welfare services, efforts have recently been made to treat kindergartens as educational institutions.

A comparison of enrollment ratios of kindergartens in various major countries shows that the enrollment ratio of five-year old children is highest in France, followed by the U.S.A. and Japan. (In England and Wales, compulsory education starts from five years old.) However, ratios are generally high in all the countries, and they are on the increase. In France, the enrollment ratio is as high as 99%, although pre-school education is not compulsory. This high ratio may be attributable to the fact that the government pays 100% of teachers' salaries and takes measures to assist in the provision of facilities and equipment so as to enroll all children who so desire.

Table 1. Percent of Age Group Enrolled in Kindergartens in Various Major Countries

Country	Year	3 yr olds	4 yr olds	5 yr olds	3-5 yr olds
Japan	1964	2.9%	22.0%	42.9%	22.7%
	1969	4.4	35.6	51.8	31.7
U.S.A.	1965	4.9	16.1	71.2	30.7
	1968	8.3	22.8	76.8	36.7
England & Wales	1964	3.1	28.0	–	15.3
	1967	3.3	28.7	–	15.8
France	1964	42.3	72.3	96.1	70.1
	1967	50.9	79.4	98.9	76.1
Germany (F.R.)	1964	–	–	–	33.0
	1967	–	–	–	33.9

Note: Actual numbers are given in Basic Table 4.

Next, it is to be noted that in Japan approximately three-fourths of the total enrollment in kindergartens are in private kindergartens, whereas in the United Kingdom, the U.S.A. and France, the proportions of enrollment in public kindergartens are very high, being 90%, 70% and 60% respectively. However in the Federal Republic of Germany, private kindergartens enroll 80% of all kindergarten children.

In addition to the pre-school programs described above, attempts have recently been made to improve the educational environments of pre-school children in the U.S.A., England and Wales and the Federal Republic of Germany, aiming at equal educational opportunities. In the U.S.A. at the pre-school level, early childhood programs called "Head Start" have been in practice since 1965, for the purpose of

giving a head start on education to children who, coming from poor families, are educationally disadvantaged. In this way they may start their elementary education at the same level as children from normal families. As of 1968, more than 2,000,000 pre-school children were participating in these programs.

In England and Wales, nursery facilities are being expanded as part of the Urban Program, for the purpose of extending education to pre-school children from poor families in urban slum areas.

In the Federal Republic of Germany, special institutions called "Schulkindergarten" (school kindergartens) aim at enrolling children who are intellectually backward due to their families' economic situation, etc., one year earlier than ordinary children.

3. Compulsory Education

(1) The Length of Compulsory Education

Compulsory education in Japan begins at the age of six and its length is nine years. The length of compulsory education in other major countries are as shown in Table 2.

Table 2. Length of Compulsory Education in Various Major Countries

Country	Length	Age range
Japan	9 years	6 – 15
U.S.A.(1)	9	7 – 16
England & Wales	10	5 – 15
France	10	6 – 16
Germany (F.R.)	9	6 – 15
U.S.S.R.	8	7 – 15

Note: (1) According to 1966 data for the U.S.A., 48 states have enacted compulsory attendance laws. Of these states, 32 demand that every normal child attend school for nine years, 8 for 10 years, 3 for 8 years, 3 for 11 years, 2 for 12 years. The compulsory entrance age is prescribed as seven years of age in most states. But as it is possible to enter elementary school one or two years earlier than this, children usually enter school at the age of six.

In France, as of 1960 the length of compusory education was extended from eight to ten years. In the Federal Republic of Germany, beginning around 1965, those states in which the number of years of compulsory schooling had been eight years extended it by one year and now it is nine years in all states. In the U.S.A.,

the majority of states enforce compulsory education for nine years, but in some states, the length is as long as 12 years.

Today, the extension of compulsory school years has become a controversial issue in many countries of the world. This problem can be approached in two ways. One is to start compusory education earlier. The other is to extend it upward. The recent extensions of compulsory education in France and Germany are examples of the latter approach. In England and Wales, the number of compulsory school years is to be extended from ten to eleven years beginning in 1972, and in the U.S.S.R. efforts are being made to implement plans for the complete enforcement of ten year compulsory education by 1970.

As for the extention of compulsory education downward, the tendency has been to take measures guaranteeing universal entrance rather than making it compulsory for pre-school children to attend school. For example, in the U.S.A. the Educational Policies Commission of the National Education Association proposed in 1966 that opportunities for free public education should be given to four year olds and up in order to provide all children at the pre-school level with early childhood education. In the Federal Republic of Germany, experiments to lower the entrance age from six to five years of age are being conducted in several states and the Federal Government has given the highest priority to pre-school education. In addition to England and Wales where compulsory education begins at the age of five, it is to be noted that in the U.S.A. and France the proportion of five year olds enrolled in institutions of pre-school education has shown a marked increase in recent years, substantially reaching the stage of universal attendance.

(2) Enrollment Ratios at the Level of Compulsory Education

The enrollment ratio at the compulsory education level in Japan is as high as in other major countries. Almost all school-age children are enrolled in schools.

Table 3. Percent of Age Group Enrolled at the Level of Compulsory Education in Various Major Countries

Country	Year	Percent of enrollment
Japan	1968	99.9%
U.S.A.	1966	99.6
England & Wales	1967	99.9
France	1967	98.7
Germany (F.R.)	1965	99.9

Note: Age ranges, enrollment and population of the corresponding age group are given in Basic Table 5.

It should not be forgotten, however, that although small in number there are pupils who are absent from school for long periods of time due to sickness, poverty and other reasons. The number of long absentees in elementary and lower secondary schools in Japan (those pupils who were absent from school for not less than 50 days during one school year either continuously or intermittently) has been decreasing every year. In 1969 it was approximately 64,000 or 0.5% of all pupils. The highest proportion of these was accounted for by sickness, followed by direct school evasion (66% and 20% respectively). The number of long absentees for economic reasons has been on the decrease in recent years. It is necessary, however, to take measures to encourage the attendance of those who have been absent for long periods for other than economic reasons as well.

One such measure is the provision of evening classes at the lower secondary school level (so-called "evening lower secondary schools") by some local authorities. These evening classes enroll not only those who are unable to attend regular day classes for economic reasons etc., but also those who did not finish compulsory education due to the poverty following World War II and those who although they finished compulsory education under the old system, want to obtain graduation certificates from the existing lower secondary schools. As of October 1969, evening classes had been set up in 20 lower secondary schools in six prefectures, enrolling 601 pupils. The number of these classes and their pupils has been decreasing in recent years, and there are now more over-age pupils than school-age pupils attending. The establishment of evening classes in lower secondary schools presents many problems for the structure of education, and therefore it is necessary to consider what the future pattern should be.

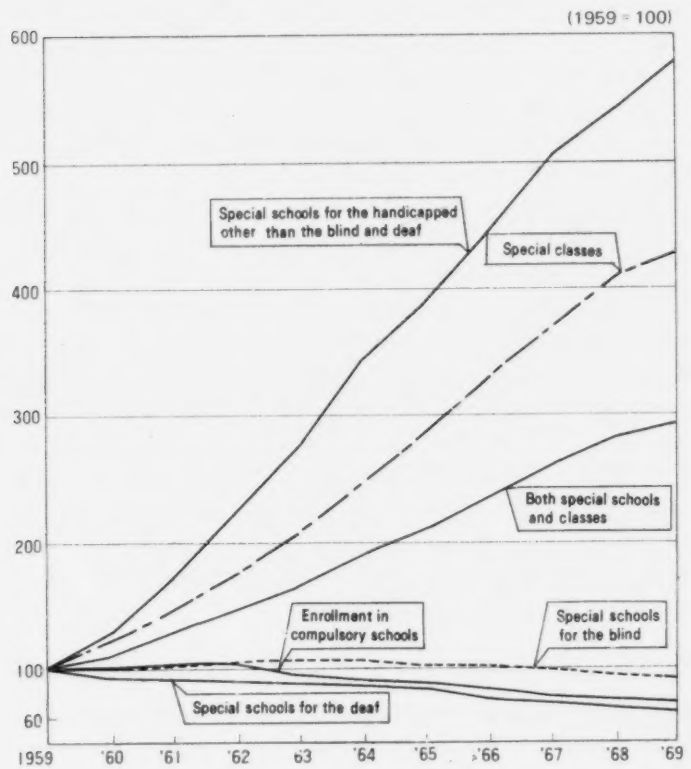
(3) Education for Mentally and/or Physically Handicapped Children

Special education for the handicapped in Japan has made remarkable progress through the expansion of special schools and classes. Consequently, enrollment in these institutions has been increasing every year, and has tripled in the last ten years. Emphasis has been placed on special schools and classes for the mentally and physically handicapped other than the blind and deaf, resulting in the recent marked increase in enrollment in these institutions.

In 1969, 3.69% of the compulsory school age population needed special education but only an estimated 30% of these were actually enrolled either in special schools or in special classes. The majority of handicapped pupils are not enrolled either in special schools or in special classes and receive the same education

as ordinary pupils in ordinary classes. For these pupils, adequate educational consideration should be given based on the severity of the handicap.

Figure 6. Trends in the Number of Compulsory School Age Children Enrolled in Special Schools or Classes, 1959–1969



Note: Actual numbers are given in Basic Table 6.

Table 4. Estimated Number of Pupils in Need of Special Education and Enrollment Percents, 1969

Type of handicap	Approximation of pupils in need of special education(1)		Enrollment in special schools	
	Number in need	Percent of total age group(2)	Number enrolled(3)	Percent of number in need
Partially or totally blind	11,460	0.08%	5,053	44.1%
Deaf and hard of hearing	15,758	0.11	11,544	73.3
Mentally retarded	296,537	2.07	121,020	40.8
Crippled	25,786	0.18	13,915	54.0
Physically weak	70,195	0.49	5,585	8.0
Sub-total	419,736	2.93	157,117	37.4
Speech impediment	47,274	0.33	1,703	3.6
Emotionally maladjusted	61,600	0.43	–	–
Total	528,610	3.69	158,820	30.0

Note: (1) "Approximation of pupils in need of special education" was obtained by the survey on the mentally and physically handicapped pupils conducted in 1967.
(2) Population of the corresponding age group was 14,325,000.
(3) "Number enrolled" includes pupils enrolled in elementary and lower secondary departments of special schools and pupils enrolled in special classes in ordinary elementary and lower secondary schools.

In addition to the above there were approximately 20,000 more severely handicapped children whose school attendance was extended or excused. It is also necessary to take appropriate measures for such children.

Since 1967, a new examination system has been in practice to allow graduation certificates from lower secondary schools to be awarded to those children whose school attendance was extended or excused for physical reasons, etc. To date 176 children have taken this examination. The Ministry of Education is also proceeding to establish a National Research Institute for Special Education (as it is tentatively called) to conduct fundamental scientific research promoting special education. The plans call for comprehensive and practical coordination of related sciences such as medicine, psychology, education and engineering and the provision of training services and research report clearing house functions. In this way a more appropriate education will be given to each child according to his individual handicap.

(4) Education for the Children of Overseas Residents

With the recent increase in the number of overseas residents, the education of their children has become a significant problem. In 1969, it was estimated that approximately 8,000 school age children would be living overseas for more than one year.

Educational opportunities for Japanese children overseas are provided either in full-time Japanese schools which have been set up in twenty-three cities, mainly in Asia, Africa and South America, or in Japanese compensatory schools which offer education, especially Japanese language education, on Saturdays and Sundays to those who are enrolled in local or international schools.

Table 5. Percent Distribution of Children Who Have Returned from Abroad by Type of Educational Institutions Attended During Their Stay Abroad

Type of educational institutions	Percent
All children in the age group of elementary, lower secondary and upper secondary education	100.0
Children enrolled in Japanese Schools	12.1
Children enrolled in local schools(1)	70.2
Children enrolled in international schools (1)	8.9
Children who did not attend any institutions	8.8

Note: (1) Includes those who attended Japanese compensatory schools, which accounts for 21.2% of the total.

Children who attended Japanese schools have no special problems upon returning to Japan, because the educational programs at these schools are based on the Japanese course of study and are subsidized by the Japanese government. However, it is difficult for most of those children who attended local or international schools to adjust to schools in Japan due to the difference in customs and educational contents. In addition, public schools in Japan often place children who have returned from overseas in grades lower than usual because of their lack of ability in the Japanese language. There is also a problem in that boarding schools are too few to enroll children who could otherwise be left at home in Japan.

Therefore, it is necessary to provide an education similar to that in Japan by taking such measures as improving and strengthening Japanese schools and Japanese compensatory schools abroad, and developing correspondence education. It is also necessary to investigate the educational content, method and systems specifically

designed for children who have returned from abroad, and to consider fully measures for children who have to be left behind in Japan so that educational opportunities may be guaranteed to these children.

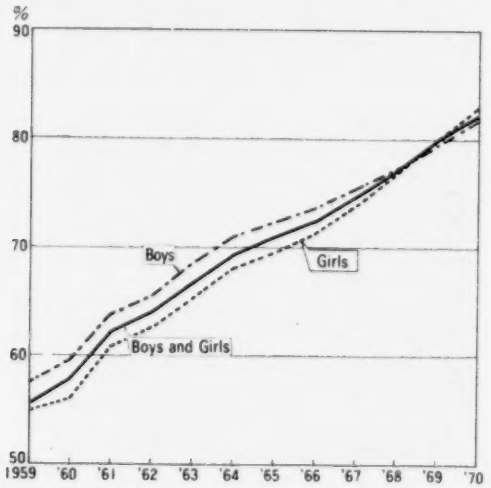
Other major countries also have schools overseas which conduct education on the basis of standards prescribed within their own countries. The United Kingdom also has a sufficient number of residential schools within the country and therefore many children are left at home; in France, correspondence education is conducted for those children who live in countries lacking French schools. In many major countries, promotional measures, such as the payment of salaries of those who teach at schools overseas, or facilities and equipment subsidies are being taken.

4. Upper Secondary Education

(1) Quantitative Status of Upper Secondary Schools

The proportion of compulsory school graduates going on to upper secondary schools increased rapidly from 43% in 1950, the year immediately following the introduction of the new school system, to 55% in 1960 and to 82% in 1970.

Figure 7. Trends in the Percent of Compulsory School Graduates Going on to Upper Secondary Schools, 1959–1970

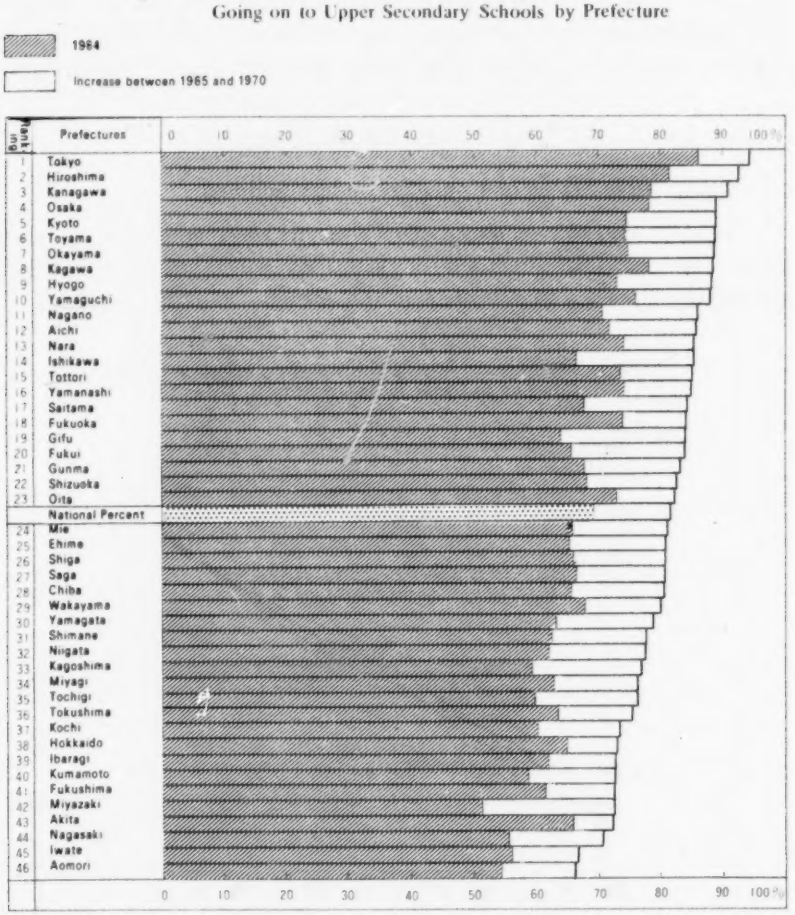


Note: Actual numbers are given in Basic Table 7.

Since the percent difference between boys and girls continuing was very large in 1950, the percent of female graduates of compulsory schools going on to upper secondary schools has risen more rapidly than that of male graduates. Since 1969, this percent has been higher than that for boys.

The percent of compulsory school graduates going on to upper secondary schools has shown a marked increase from 1964 to 1970 in all prefectures. In some

Figure 8. Trends in the Percent of Compulsory School Graduates Going on to Upper Secondary Schools by Prefecture



Note: Actual numbers are given in Basic Table 8.

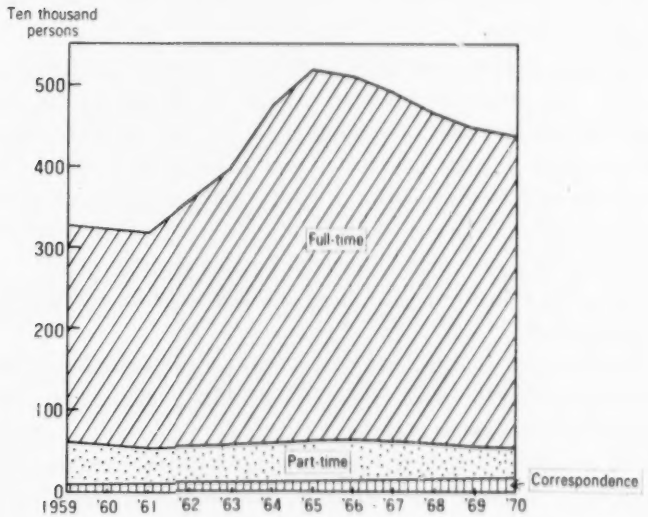
prefectures, the rate of increase between these years was more than 18%. Nevertheless, differences between prefectures are still large. The difference between the highest and lowest prefectures was 28% in 1970, although this difference is smaller than that in 1964.

(2) Number of Upper Secondary School Students by Type of Enrollment and by Course

a. Number of Students by Type of Enrollment

As of 1970, the number of upper secondary school students was 4,380,000, of which 3,850,000 were full-time students, 370,000 part-time students, and 160,000 correspondence students. During the last ten years, the total number of upper secondary school students reached a peak of 5,190,000 in 1965, after which it has been gradually decreasing.

Figure 9. Trends in the Number of Upper Secondary School Students by Type of Enrollment, 1959–1970



Note: Actual numbers are given in Basic Table 9.

However, an analysis of the changes in the percent distribution of the number of upper secondary school students, by type of enrollment, shows that while full-time and correspondence students showed a gradual increase in proportion to the total, part-time students tended to decrease. This was due to the increase in the proportion of lower secondary school graduates entering full-time upper secondary schools.

Table 6. Percent Distribution of Upper Secondary School Students by Type of Enrollment

Year	Total	Full-time	Part-time	Correspondence
1959	100.0%	81.5%	16.6%	1.9%
1964	100.0	87.6	10.1	2.3
1970	100.0	88.0	8.4	3.6

Note: Actual numbers are given in Basic Table 9.

The gradual increase in the number of correspondence students is attributable to the convenience of this method of study for working youths and to the fact that in recent years an increasing number of enterprises enroll groups of their employees in correspondence schools.

Various measures have been taken to promote part-time and correspondence education for the benefit of working youths. "Experimental part-time and correspondence schools" which have both part-time and correspondence courses have been promoted to study how these types of education can meet the actual conditions of working youths. In addition, there is a system of cooperation between upper secondary part-time and correspondence schools and training facilities within enterprises. Moreover the system of study at training facilities within enterprises which is equivalent to that of regular upper secondary schools, has been expanded since its introduction in 1962.

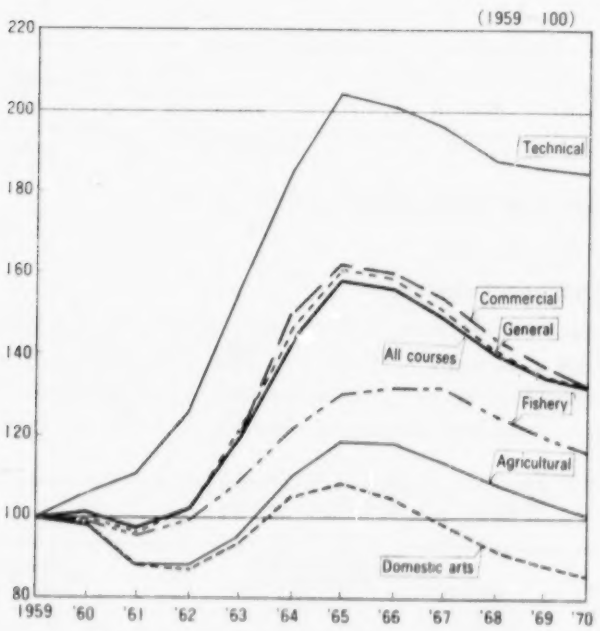
As of 1970, there were five upper secondary schools exclusively designed as correspondence schools for students living in all parts of the country. The NHK Upper Secondary School is one of these.

In 1970 enrollment in private full-time upper secondary schools was 32.7%. The proportion of full-time upper secondary school students enrolled in private schools has been about 30% except in 1964 and 1965 when it increased slightly due to the rapid increase in the total number of children entering upper secondary schools. This proportion, however, greatly differs from one prefecture to another, ranging from a high of 60% to a low of 5%. (See Basic Table 11.)

b. Number of Upper Secondary Schools by Course

From 1959 to 1970 the number of full-time and part-time upper secondary school students increased by 90% in technical courses, and by 30% in commercial and general courses. Enrollment in home-making courses decreased from 1959, while enrollment in agricultural courses remained the same.

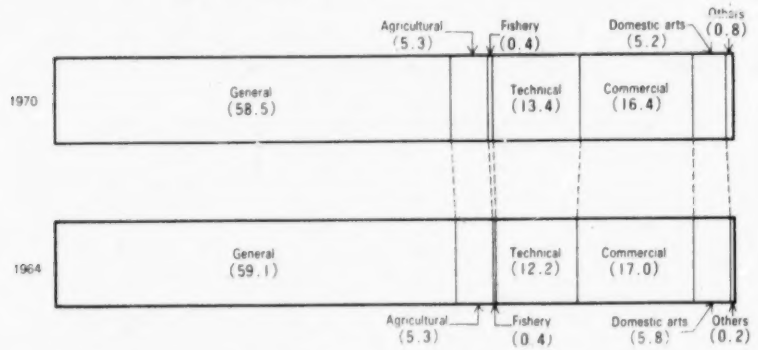
Figure 10. Number of Upper Secondary School Students by Course, 1959–1970



Note: Actual numbers are given in Basic Table 10.

The number of students enrolled in general courses was 2,470,000, while the number in vocational courses was 1,730,000. This ratio has changed very little nationally, but differs widely from prefecture to prefecture. The proportion of general course students ranges from a high of 70% a low of 35%. (See Basic Table 12.)

Figure 11. Percent Distribution of Upper Secondary School Students by Course, 1964 and 1970



Note: Actual numbers are given in Basic Table 10.

(3) International Comparison

In Japan the proportion of compulsory school graduates entering upper secondary schools recently went over 80%. This percent stands high in the world and is exceeded only by the U.S.A. On the other hand in European countries, the proportion of compulsory school graduates going on to educational institutions at

Table 7. Percent of Compulsory School Graduates Going on to Upper Secondary Education in Various Major Countries

Country	Final grade of compulsory education	Latest year for which data is available		1964	Annual average rate of increase
		Year	Percent (A)	Percent (B)	$(\frac{A-B}{B} \times 100) \div$ Number of years
			%	%	%
Japan	IX	1970	82.1	69.1	3.7
U.S.A.	IX	1967	97.7	96.7	0.3
England & Wales	X	1967	53.5	43.6	7.6
France	IX	1967	73.1	62.1	5.9
Germany (F.R.)	VIII	1965	50.4	47.6	5.9

Note: Actual numbers are given in Basic Table 13.
Figures for Japan are the percent of pupils going on to upper secondary schools after graduation from lower secondary schools in March of each year. Figures for the other countries are the percent of enrollment in the first year after compulsory education as a percent of the total corresponding age group.

the upper secondary school level still remains low, but the rate of increase in this proportion is much higher than in Japan and the U.S.A. This is due to the fact that in the European countries reforms are being made to expand secondary education.

In Japan the majority of students who enter upper secondary schools graduate. In the other major countries, however, a rather low percent of students at this level continue their studies until graduation. In the U.S.A. only 76% graduated from high schools in 1968. In 1967, in England and Wales and France, 28% and 64% respectively of the upper secondary students continued their studies up to the age of seventeen. This is attributable not only to the existence of many dropouts but also to the fact that in European countries when pupils reach the maximum compulsory school age they can take various occupational qualifying examinations conducted by out-of-school organizations.

Next, attention is to be paid to part-time education at the upper secondary level in the major countries. Part-time educational institutions in the European countries in most cases correspond to the "miscellaneous schools" or to institutions other than regular schools in this country. They are in many cases under the supervision of government agencies other than the Ministry of Education. Thus, comparative study is difficult. Generally speaking, however, it may be said that part-time educational and training institutions for working youth are well organized in the European countries. The aims and types of these institutions are different from country to country, but in general, they provide mainly evening or part-time day courses one or two days a week so that working youths may improve their knowledge and skills and thus acquire qualifications needed in their occupations. Table 8 presents the enrollment percents of these part-time institutions. It can be seen that more than 70% of those who left school after compulsory education attend either full-time or part-time educational institutions.

Table 8. Percent of Those Who Left School after Compulsory Education Attending Part-time Educational and Training Institutions in the United Kingdom, France and the Federal Republic of Germany

Country	Year	Corresponding age limits	Part-time institutions	Full-time institutions	Total
England & Wales	1967	15–17	33.9%	29.0%	72.9%
France	1965	15–17	23.1	50.1	73.2
Germany (F.R.)	1966	16–18	50.6	21.6	72.2

Note: Actual numbers are given in Basic Table 14.

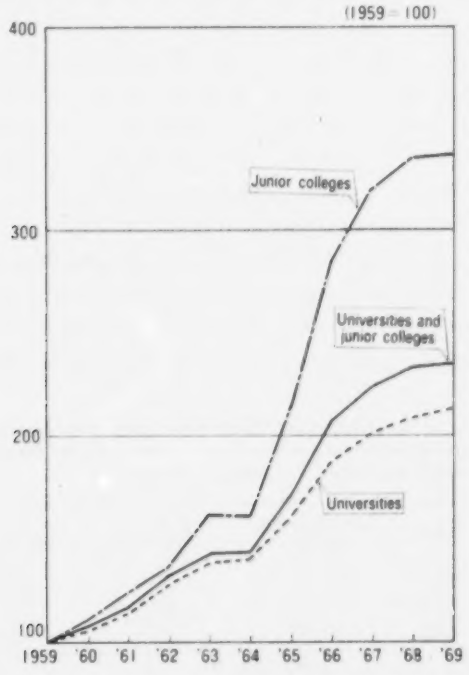
5. Higher Education

(1) Quantitative Status of Universities and Junior Colleges

a. Annual Changes in the Number of Entrants

In recent years the number of entrants into universities and junior colleges has increased considerably, reaching 457,000 in 1969, 2.4 times as many as in 1959. This accounts for 21.4% of the corresponding age group. The increase was especially marked between 1965 and 1967, as students who were born in the baby boom from 1947 to 1949 graduated from upper secondary school. Since 1968, upper secondary school graduates have been decreasing in number. However, due to the increasing demand for higher education, entrants into universities and junior colleges are expected to continue increasing in the future.

Figure 12. Entrants into Universities and Junior Colleges, 1959–1969

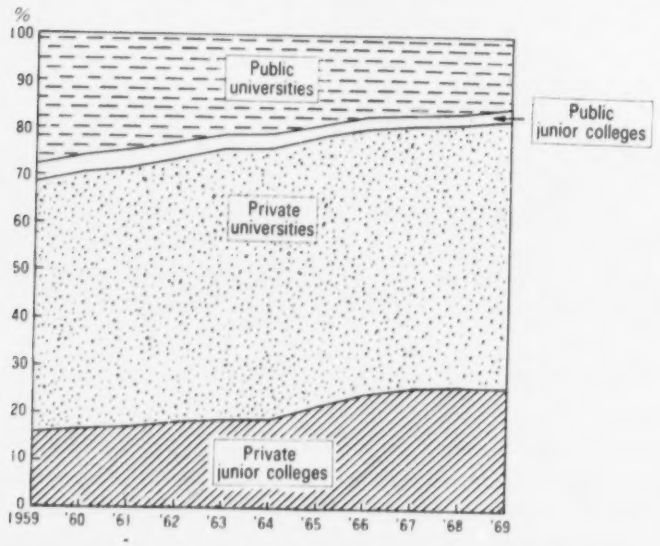


Note: Actual numbers are given in Basic Table 15.

Of the 1969 total, 329,000 entered universities, and 128,000 junior colleges, being two and three times as many as in 1959, respectively. The increase was especially marked for junior colleges. This is, as will be seen later, closely related to the rapid increase in the number of female entrants into junior colleges.

Entrants into private universities and junior colleges have increased from 70% of total entrants in 1959 to 82% in 1969. From 1965 to 1968 when the number of those who wanted to enter institutions of higher education increased rapidly, entrants into private universities and junior colleges increased considerably. Thus, the expansion of opportunities for higher education during this period was achieved mainly by private institutions.

Figure 13. Percent Distribution of University and Junior College Entrants by Type and by Establishing Body, 1959–1969



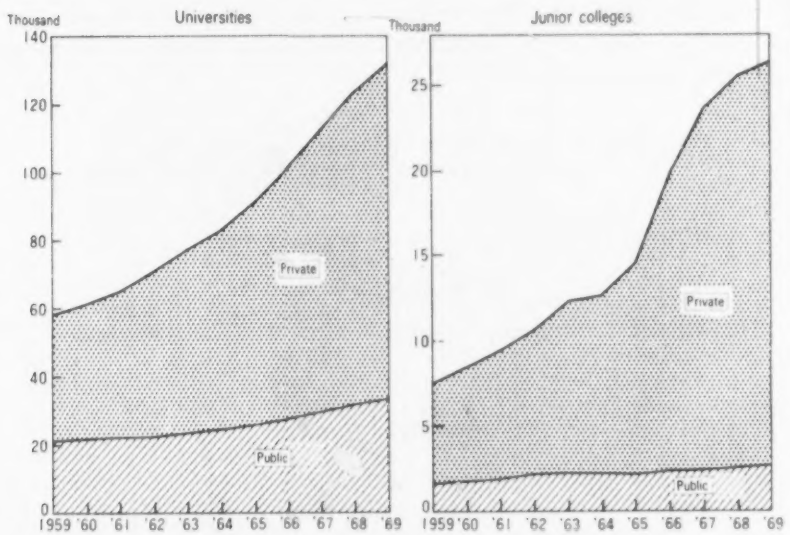
Note: Actual numbers are given in Basic Table 15.

b. Annual Changes in Enrollment

Enrollment in universities and junior colleges has increased rapidly in recent years, reaching 1,580,000 in 1969 (1,320,000 in universities and 260,000 in junior colleges).

The increase was especially large in private universities and junior colleges. The proportion of students enrolled in private universities and junior colleges increased from 66% in 1959 (430,000) to 78% in 1969 (1,230,000). Seventy-five percent of the university students (990,000) and 90% of the junior college students (240,000) were enrolled in private institutions in 1969.

Figure 14. Enrollment in Universities and Junior Colleges



Note: Actual numbers are given in Basic Table 16.

Such an increase in enrollment was made possible by the establishment of new institutions, faculties and departments. The establishment of new faculties and departments within existing universities and junior colleges contributed greatly to the increase in enrollment. In 1969 there were 852 universities and junior colleges (379 universities and 473 junior colleges), 1.7 times as many as in 1959, while enrollment rose 2.4 times (2.3 times for universities and 3.5 times for junior colleges). This shows that the size of institutions of higher education has tended to become large. There were only ten universities with an enrollment of more than 10,000 in 1959. By 1969, however, this number had increased to 32. This tendency has raised various problems.

In other major countries, the recent increase in enrollment has also resulted in the expansion of the size of universities, and various administrative and managerial measures have been taken to meet this situation. Table 9 presents some large universities in various major countries.

Table 9. Large Universities in Various Major Countries

Name of University	Year	Enrollment
Nippon Daigaku (Japan)	1969	72,625
Waseda University (Japan)	1969	43,094
New York State University (U.S.A.)	1969	179,107
California State College (U.S.A.)	1969	139,100
New York City University (U.S.A.)	1969	83,053
University of London (U.K.)	1967	39,523
University of Paris (France)	1966	140,765
Munich University (Germany (F.R.))	1968	25,546
Moscow University (U.S.S.R.)	1966	30,223

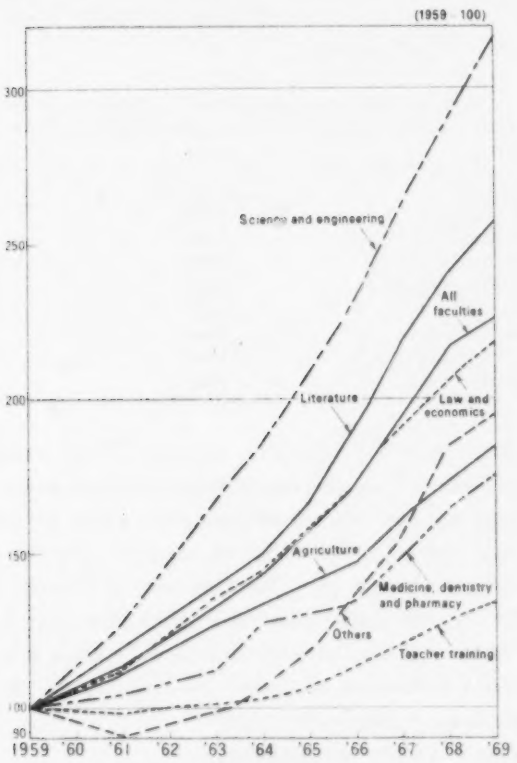
New York State University and California State College, which enroll more than 100,000 students, are examples of affiliating universities which have consolidated various types of higher educational institutions within the states under the supervision of state regents so that higher education in these two states may be expanded according to a central plan. The University of London also falls into this category. On the other hand according to the Fundamental Law of Higher Education enacted in 1968, the University of Paris in France is to be divided into thirteen independent universities to counter the tendency for the university to become large scale due to enrollment increases.

c. Enrollment by Faculty or Department

Enrollment has shown a comparatively high rate of increase in the faculties of science, engineering and arts. While total enrollment increased 2.3 times from 1959 to 1969, enrollment in science and engineering increased 3.2 times and enrollment in arts 2.6 times.

In terms of percent distribution of university enrollment by faculty, in 1969 the faculties of law and economics enrolled the largest proportion of students, followed by those of science and engineering, literature, teacher training, medicine, dentistry, and pharmacy, and agriculture in descending order. On the other hand, in junior colleges, the largest percent of students was enrolled in departments of home economics, followed by departments of arts, teacher training, law and economics, science and engineering, hygiene, and agriculture.

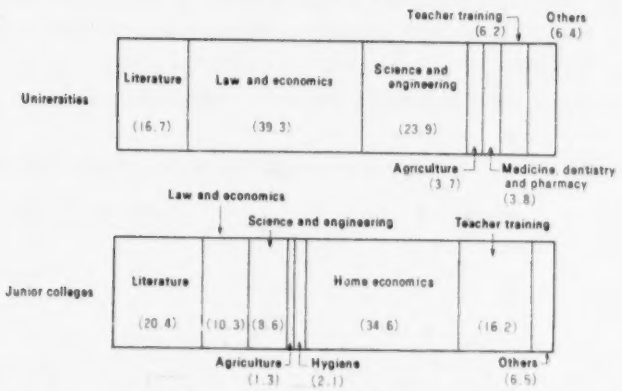
Figure 15. University Enrollment by Faculty, 1959–1969



Note: Actual numbers are given in Basic Table 17.

The percent distribution by university faculty is different between national and local public universities on the one hand and private universities on the other. In the national and local public universities in 1969, the percent of science and engineering students was the highest, followed by teacher training, law and economics, and arts. On the other hand, in the private universities, students in arts, and law and economics account for 66%, while science and engineering students make up 22%. In terms of sheer numbers, however, private universities accommodate more science and engineering students than national and local public

Figure 16. Percent Distribution of Enrollment by Faculty or Department, 1969



Note: Actual numbers are given in Basic Table 17.

universities. The number of science and engineering students in private universities was 213,000 as against 97,000 in national and local public universities.

Thus, students in humanities and social sciences account for a larger percentage than students in natural sciences in this country. However, in light of the increasing social demand due to developments in science and technology, not only national and local public universities but private universities are making efforts to expand their science and engineering sectors. These efforts are reflected in the increasing percent of science and engineering students in both national and local public universities, and private universities.

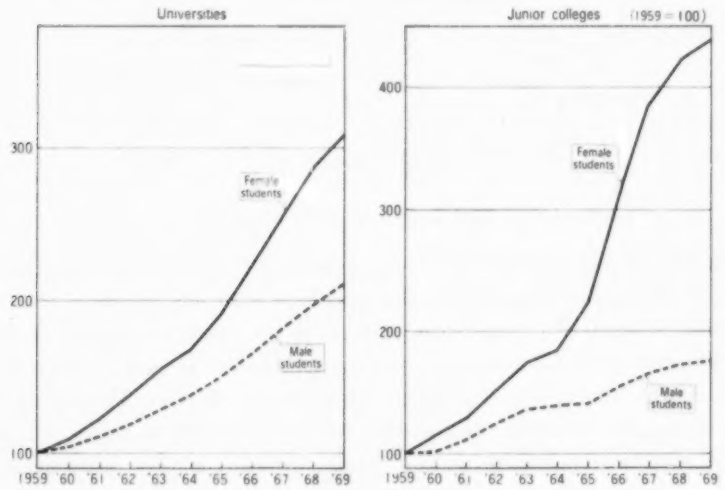
Table 10. Percent Distribution of University Students by Faculty, 1959 and 1969

	Year	All faculties	Literature	Law & economics	Science & engineering	Agriculture	Medicine, dentistry & pharmacy	Teacher Training	Others
		%	%	%	%	%	%	%	%
Public	1959	100.0	10.1	15.0	28.8	8.4	6.0	23.6	8.1
	1969	100.0	9.4	16.6	30.7	8.1	5.6	21.0	8.6
Private	1959	100.0	17.5	51.9	19.3	2.6	3.3	0.9	4.5
	1969	100.0	19.0	46.6	21.8	2.3	3.3	1.4	5.6

d. Proportion of Female Students

The number of female students in universities and junior colleges reached 460,000 in 1969. This is 3.6 times that in 1959. In universities, the total was 240,000, 3 times that in 1959. In junior colleges, it was 220,000 or 4 times the 1959 total. This high rate of increase in the number of female students presents a striking contrast to the comparatively low rate of increase for male students.

Figure 17. Female Enrollment in Universities and Junior Colleges, 1959–1969



Note: Actual numbers are given in Basic Table 19.

With this increase in the number of female students, the proportion of female students increased from 19% in 1959 to 29% in 1969. The proportion was 18% in universities and 82% in junior colleges.

The distribution of female students, by faculty or department is as shown in Table 11.

Table 11. Percent Distribution of Female Students by Faculty or Department, 1969

Faculty or department	Universities	Junior colleges
	%	%
All faculties and departments	18.2	82.2
Literature	51.9	96.2
Law and economics	5.0	41.5
Science	13.7	87.3
Engineering	0.6	3.0
Agriculture	5.4	13.5
Medicine, dentistry and pharmacy	38.5	89.2
Home economics	99.7	99.8
Teacher training	50.0	99.4
Others	38.2	93.8

Note: Actual numbers are given in Basic Table 20.

e. International Comparison

Increased enrollment in institutions of higher education is a recent phenomena which can be seen not only in Japan but also in other major contries.

Although the absolute number of students enrolled in institutions of higher education is greatly different from one country to another, a tendency toward increase is commonly seen.

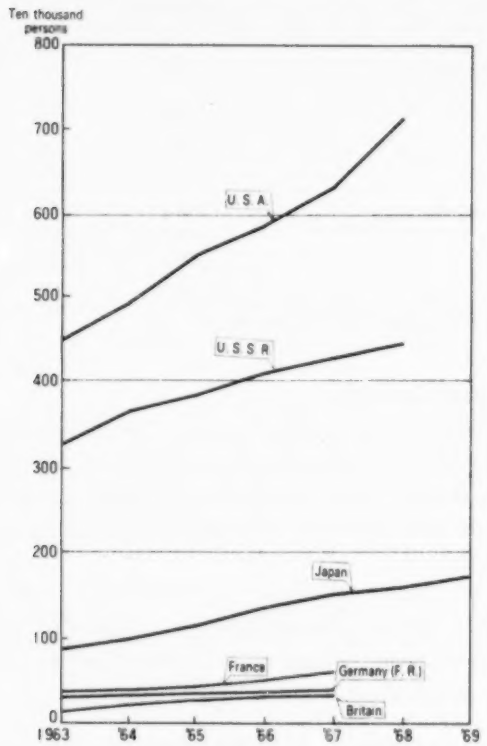
In terms of the number of students in institutions of higher education per 1,000 inhabitants, the U.S.A. ranks first, followed by the U.S.S.R. and Japan. But in the recent years the annual average rate of increase has been low in the U.S.A. and the U.S.S.R., while it is high in Britain, France and Japan.

Table 12. Enrollments in Institutions of Higher Education per 1,000 Inhabitants in Various Major Countries

Country	Latest year for which data is available		1964	Annual average rate of increase $(\frac{A-B}{B} \times 100) \div \frac{\text{Number}}{\text{of years}}$
	Year	Enrollment (A)	Enrollment (B)	
				%
Japan	1969	16.2	10.2	11.8
U.S.A.	1968	34.7	25.9	8.5
Britain	1967	6.2	4.4	13.7
France	1967	10.6	7.5	13.7
Germany (F.R.)	1967	5.8	5.3	3.1
U.S.S.R.	1968	18.9	15.9	4.7

Note: Actual numbers are given in Basic Table 22.

Figure 18. Enrollment in Institutions of Higher Education in Various Major Countries, 1963–1969



Note: Actual numbers are given in Basic Table 21.

As for distribution of enrollment by field of study, the proportion of students in humanities and social sciences is generally very high, being over 50% in Japan, the U.S.A. and France, although in the U.S.S.R. science students account for more than 50%. It should also be noted that, except for France, students in education account for higher percentages of total students than in Japan.

Table 13. Percent Distribution of Enrollments in Higher Educational Institutions by Field of Study in Various Major Countries

Country	Year	All fields	Humanities & social sciences	Natural sciences	Education	Medicine & dentistry	Others
		%	%	%	%	%	%
Japan	1968	100.0	51.4	24.8	7.8	3.2	12.8
U.S.A.	1967	100.0	53.3	18.9	20.2	1.7	5.9
Britain	1967	100.0	26.9	29.0	36.9	7.2	–
France	1966	100.0	55.5	28.9	–	12.1	3.5
Germany (F.R.)	1967	100.0	39.0	25.2	18.6	11.6	5.6
U.S.S.R.	1968	100.0	7.4	54.7	30.4	6.6	0.9

Note: Actual numbers are given in Basic Table 23.

In this country, most university entrants obtain bachelor's degrees in the regular period of four years. Unlike Japan, however, very few students in the other major countries finish their first degree course in the regular period. Table 14 presents the percent of students who have obtained degrees within the regular period within various major countries.

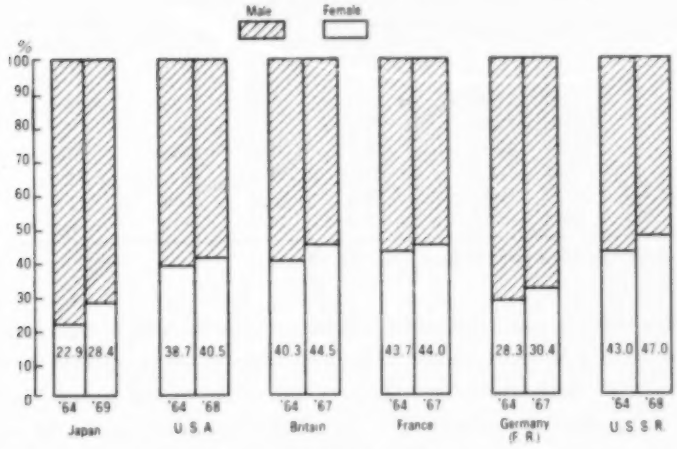
Table 14. Percent of Students Who Have Obtained Degrees within the Regular Period

Country	Year in which degrees were obtained	Regular period	Percent
		Year	%
Japan	1966–68	4	85.5(1)
U.S.A.	1968	4	50.0(2)
Britain	1965	3	77.7
France	1964	4	13.4(3)

Note: Actual numbers are given in Basic Table 24.
(1) Average percent of students who entered universities in 1962, 1963 and 1964 and obtained bachelor's degrees in 1966, 1967 and 1958 respectively.
(2) Estimated by the U.S. Office of Education.
(3) Data from the French Ministry of Education.

The proportion of female students in Japan was 28.4% in 1969, comparatively lower than in other major countries.

Figure 19. Proportion of Female Students in Higher Educational Institutions in Various Major Countries



Note: Actual numbers are given in Basic Table 25.

(2) Quantitative Status of Technical Colleges

Technical colleges are 5 year institutions (five years and six months in the Mercantile Technical Colleges) providing technical education to lower secondary school graduates or the equivalents. Industrial Technical Colleges were established in 1962, to meet the quantitative and qualitative shortage of technicians caused by technological developments. In 1967, Mercantile Technical Colleges were set up to train seamen with high level knowledge and skills to meet the recent remarkable developments and modernization of marine transportation in our country. Trends in enrollment and in the number of colleges are as shown in Table 15.

Table 15. Trends in Enrollment and in the Number of Technical Colleges, 1962–1969

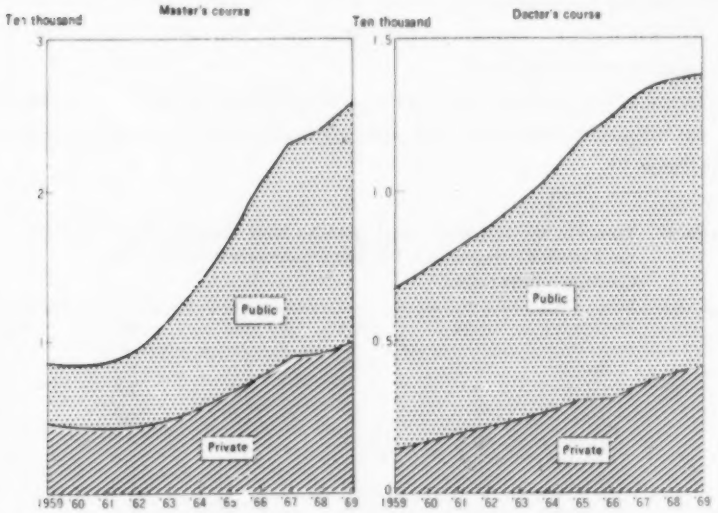
		1962	1963	1964	1965	1966	1967	1968	1969
Industrial technical colleges	Number of colleges	19	34	46	54	54	55	55	55
	Enrollment	3,375	8,560	15,398	22,208	28,795	34,126	37,550	40,255
Mercantile technical colleges	Number of colleges	–	–	–	–	–	5	5	5
	Enrollment	–	–	–	–	–	395	815	1,382

(3) Quantitative Status of Graduate Schools

Graduate schools are organized separately from undergraduate faculties, and include master's and/or doctor's courses. As of 1969, 175 universities (58 national, 17 local public and 100 private) had graduate schools. This is 46% of all the 379 universities. In 1959, there were only 78 such universities.

Graduate school enrollment has been steadily increasing, reaching 26,000 in master's courses and 14,000 in doctor's courses in 1969, a rate of increase since 1959 of 3 times and 2 times respectively. Sixty-one percent of the students in master's courses and 69% of the students in doctor's courses are enrolled in public institutions.

Figure 20. Graduate School Enrollment Trends by Establishing Body, 1959–1969



Note: Actual numbers are given in Basic Table 26.

The distribution of graduate school students who obtained degrees in 1968, by field of study is as shown in Table 16.

Graduate schools are set up in Japan, the U.S.A., Britain and the U.S.S.R., but in France and West Germany, no system of graduate schools exists. However, the third cycle of French universities, i.e., advanced courses for those students

Table 16. Percent Distribution of Graduate School Students Who Obtained Degrees in 1968 by Field of Study

Degrees	All fields	Humanities	Social sciences	Natural sciences	Engineering	Agriculture	Medicine, dentistry & pharmacy	Home economics	Education	Art
	%	%	%	%	%	%	%	%	%	%
Master's degree	100.0	13.1	14.1	13.7	43.3	7.6	3.2	0.8	2.5	1.7
Doctor's degree	100.0	1.1	1.9	11.3	13.4	6.3	65.7	–	0.3	–

Note: Actual numbers are given in Basic Table 27.

who have completed four years of a university course can be regarded as equivalent to graduate schools. Master's and doctor's degrees are granted to those who have finished such advanced courses. In West Germany, university graduates can be granted doctor's degrees on the basis of a dissertation evaluation, but master's degrees are non-existent.

The number of students who were granted degrees beyond the bachelor's degree, per 100,000 inhabitants, from 1964 to 1968 in various major countries is shown in Table 17.

Table 17. Trends in the Number of Students Who Were Granted Degrees beyond the Bachelor's Degree per 100,000 Inhabitants in Various Major Countries, 1964–1968

Country	Degrees	1964	1965	1966	1967	1968
Japan	Master's	4.9	6.0	7.6	9.2	9.1
	Doctor's	3.3	3.9	4.3	4.7	4.5
	Total	8.2	9.9	11.9	13.9	13.6
U.S.A.	Master's	58.6	72.5	75.2	89.3	94.5
	Doctor's	8.6	9.4	10.1	11.7	13.1
	Total	67.2	81.9	85.3	101.0	107.6
Britain	Master's	–	5.5	7.4	9.4	–
	Doctor's	–	6.3	7.0	8.2	–
	Total	9.1	11.8	14.4	17.6	–
France	Doctor's	10.3	10.4	11.8	13.0	–
Germany (F.R.)	Doctor's	12.0	11.8	10.5	13.5	–
U.S.S.R.	Master's	6.8	8.4	9.4	10.1	10.8

Note: Actual numbers are given in Basic Table 28.

In terms of the number of those who were granted degrees beyond the bachelor's degree, per 100,000 inhabitants in 1967, Japan is exceeded by the U.S.A. and Britain. The annual rate of increase in this number is remarkable in all of the major countries, since it exceeds that of the rate of increase in the total enrollment in higher educational institutions. This is due to the fact that in all the major countries streneous efforts have been made in recent years to expand education at the graduate school level. The ratios of master's degree grantees to doctor's degree grantees in Japan, the U.S.A. and Britain has recently been approximately 2 to 1, 9 to 1 and 1 to 1, respectively. It should be noted that this ratio is extremely high in the U.S.A.

As for the distribution by field of study,students in humanities, social sciences, and education account for nearly three-fourths of the total number granted master's degrees in the U.S.A. In Britain, the proportion of grantees in natural sciences is somewhat higher than that in the humanities and social sciences. On the other hand, in Japan, the proportion of grantees in natural sciences account for two-thirds, and in the U.S.S.R. three-fourths, of the total. As for doctor's degrees, grantees in natural sciences and medicine and dentistry are dominant. This is specially true in Britain, where the proportion of doctor's degree grantees in natural sciences, exceeds two-thirds of the total. In Japan, the proportion for medicine and dentistry amounts to two-thirds.

Table 18. Degree Grantees in Various Major Countries by Field of Study

Country	Year	Degree	Total	Humanities & social sciences	Sciences & engineering	Education	Medicine & dentistry	Others
			%	%	%	%	%	%
Japan	1968	Master's	100.0	29.3	64.7	0.4	3.2	2.4
		Doctor's	100.0	3.4	30.9	–	65.7	–
U.S.A.	1967	Master's	100.0	37.3	19.6	35.9	–	7.2
		Doctor's	100.0	21.8	31.9	11.8	33.0	1.5
Britain	1967	Master's	100.0	42.8	48.1	6.5	2.6	–
		Doctor's	100.0	16.8	72.3	0.9	10.0	–
France	1967	Doctor's	100.0	14.6	37.0	–	46.7	1.7
Germany (F.R.)	1968	Doctor's	100.0	22.3	28.5	1.9	42.3	5.0
U.S.S.R.	1967	Master's	100.0	18.0	74.7	1.8	5.4	–

Note: Actual numbers are given in Basic Table 29

(4) Problems in Higher Education

The recent development in higher education has been remarkable. The student unrest during 1968 and 1969, however, has led to increasing criticism of the university system from various circles.

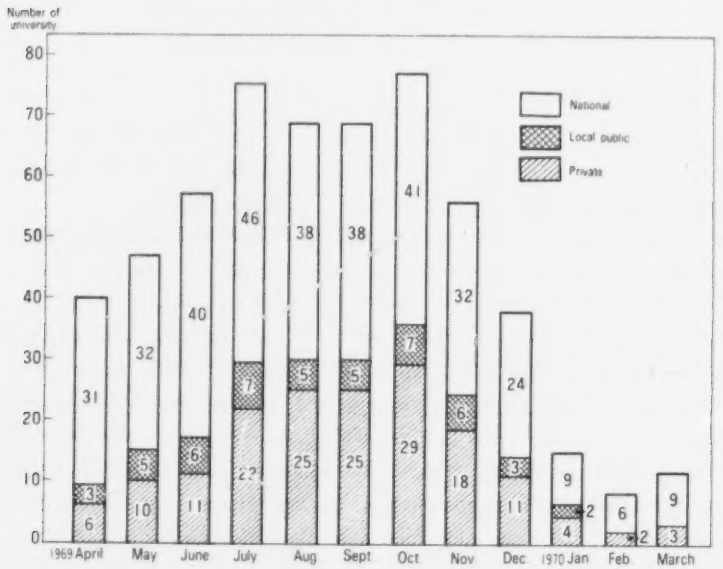
The student unrest is related to various political and social factors. Many of the opinions expressed by protesting students are also related to political problems. Therefore, many of the university problems can not be solved exclusively within the higher educational system. It can not be denied, however, that there are also many problems, in the systems of teaching and research, and of administration and management and that these have contributed to student unrest and have made its solution difficult.

Student unrest occurred in connection with student demands for curriculum improvement, withdrawal of raises in tuition fees, self-management of student halls and dormitories, student participation in university administration, withdrawal of student punishments, etc. This coupled with tactics by violent students, such as boycotting classes, blockading and occupying university facilities, informal confinement and impeachment of teachers, in demonstrations aimed at the revocation of the Japan-U.S. Security Treaty and opposition to the Vietnam War plunged the universities into much confusion. In many cases such situations persisted for long periods of time due to inappropriate measures taken by the university authorities and to the fact that there were many sympathizers among non-political students and young faculty members.

In October 1969 when student unrest was at its peak, 41 national, 7 local public, and 29 private universities were involved. Student unrest occurred more frequently in national universities with comparatively favorable educational conditions than in private universities. Moreover, it persisted for the longest periods of time in those universities with long historical traditions and large student bodies. This implies that there are systemic problems in teaching and research beyond the simple provision of teachers, equipment and facilities. It also suggests that it is not easy for old and traditional large-size universities to show university-wide cohesion and to change easily.

As student unrest became intensified and prolonged, public criticism against the student movement increased, and in August 1969, a Law for Provisional Measures Concerning University Governance was enacted. Thereafter, in many universities violence irrespective of ideology was disallowed, and measures were

Figure 21. Number of Universities Involved in Student Unrest During the 1969 Academic Year



Note: Universities enumerated here are those in which normal university operations became impossible due to the boycotting of classes, and blockading and occupation of facilities by students.

taken to eliminate any violent actions. When it was impossible to do so alone, police were used. Student unrest was thus brought under control.

If the problems pointed out during student unrest are to be solved however, further effort is required to provide curricula which considers the diversification and popularization of higher education, to improve methods of education, and to reform administrative structures in such a way that they may cope with the tendency for universities to become bigger.

Student unrest has also occurred in the U.S., France and West Germany in recent years. Violent actions occurred repeatedly in various forms in these countries. The causes differed according to conditions within each country in general and to respective traditions of higher educational institutions in particular. But common to all was the criticism or opposition of the younger generation directed against established institutions. The manner in which the governments of

the respective countries met these situations differed, but the enactment of basic laws concerning higher education, the creation of new systems of teaching and research, and the reform of administrative and managerial structures were some of the measures taken.

(5) Foreign Students

Foreign students include not only those who come to Japan for the purpose of doing research or receiving education at Japanese research or educational institutions, but also those who are permanent residents in Japan.

Students from abroad are classified into two categories: Japanese government scholarship students and privately-sponsored students. The number of students from abroad was approximately 4,000 in 1969 (scholarship students: 612, privately-sponsored students: 3,393), which account for only 40% of the total number of foreign students (scholarship students: 6%, privately-sponsored students: 34%). The Japanese government has emphasized the granting of its scholaships to students from Southeast Asia and the Middle and Near East, so as to assist the countries in these regions in developing human resources. As a result of this policy, the number of students from these regions has been increasing every year. In 1969, approximately 82% of the government scholarship students and 66% of the privately-sponsored students were from Southeast Asia, and the Middle and Near East. The proportion of students from aborad who are enrolled in higher educational institutions in Japan is lower than in other major countries, due to the difficulty in learning the Japanese language and to the differences in the university education system. Considering the important international role that Japan has come

Table 19. Proportion of Foreign Students in Higher Educational Institutions in Various Major Countries

Country	Latest year for which data is available			1964	
	Year	Actual number	Percent	Actual number	Percent
			%		%
Japan	1969	10,086	0.6	7,454	0.8
U.S.A.	1967	110,315	1.7	82,045	1.7
Britain	1967	15,234	7.6	14,483	10.4
France	1967	56,600	9.9	46,001	11.3
Germany (F.R.)	1967	23,139.	6.7	23,811	7.7

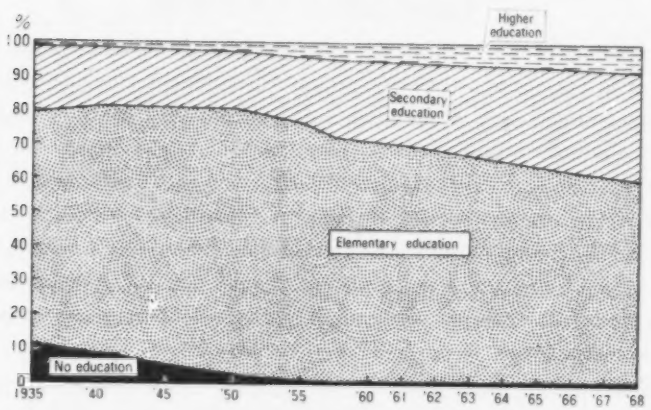
to play in recent years, however, in the future it will be necessary to expand and improve the system of receiving students from abroad.

Foreign students as a proportion of the total enrollment in higher educational institutions has tended to decrease in the other major countries. This trend, however, is attributable to the more rapid increase in the total enrollment in these countries. Except in West Germany, the trend of increasing total enrollment is on the increase. Although the proportion of foreign students in the U.S. is low, the absolute number is 110,000, higher than any other country.

6. Educational Attainments of the People

Since 1940 when it was the highest, the proportion of the working-age population with no more than elementary education completed has been decreasing, while the proportion who received secondary or higher education has been rapidly increasing. This trend accelerated after World War II. Looking at the statistics for 1968, 60% had finished only elementary education, 32% secondary education, and 8% had completed higher education.

Figure 22. Trends in the Educational Attainments of the Working-Age Population (15–64 years of age)



Note: Actual numbers are given in Basic Table 30.
The number of persons of working age who had completed each level of education was estimated on the basis of the number of students graduated annually in past years.

The rise in the educational attainments of the working age population can be attributed to the expansion of educational opportunities resulting from both a rising popular demand for education and an increased national income due to high economic growth, but in turn such educational expansion is an important factor in Japan's social and economic development.

The comparison of Japanese educational attainments with those of the American people shows that the proportion of Japanese who have completed higher education is still lower than that of Americans.

Table 20. Distribution of Population 15 Years of Age and Over by Highest Level of Education Completed in Japan and the U.S.A.

Country	Year	Total	No education(1)	Elementary education	Secondary education	Higher education
		%	%	%	%	%
Japan	1968	100.0	0.3	59.3	32.4	8.0
U.S.A.	1967	100.0	4.7	46.5	30.2	18.6

Note: (1) Includes those persons who dropped out from elementary schools.

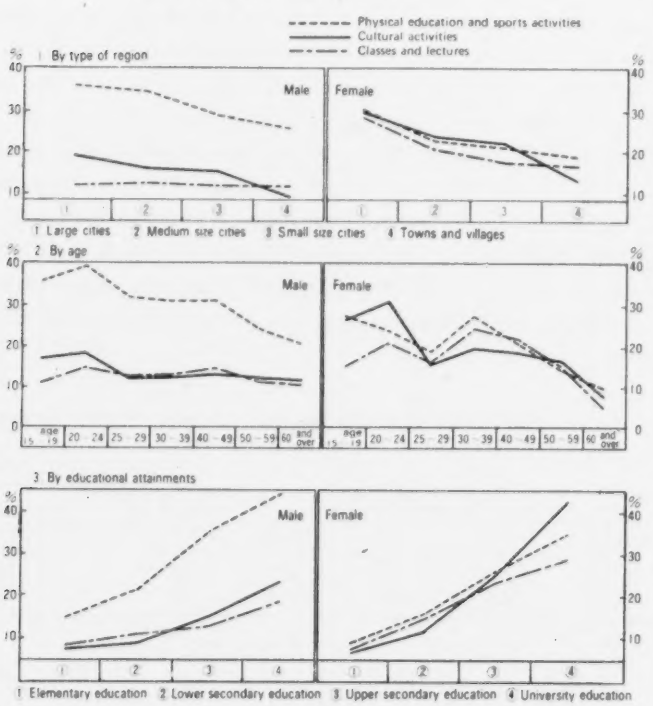
7. Opportunities for Education and Training Other Than School Education

In addition to the educational activities provided in the regular schools mentioned in the preceding sections, various educational and training activities of varying content and methods are being conducted in homes, in businesses and elsewhere. The demand for life-long integrated education has been increasing in light of the increasing necessity to continue acquiring new knowledge and skills to cope with our rapidly changing society, the awareness that there are cases in which it is more effective to offer education outside schools rather than in schools and the realization that learning throughout life enriches the mind, and gives life additional meaning. Therefore, in recent years special emphasis has been placed on providing education and training in institutions other than schools.

In order to meet this demand for life-long integrated education, it is necessary to clarify the respective roles to be played by schools, homes and society, and to establish cooperative, organic relationships among them. In the sections which follow, the existing formal educational and training opportunities other than school education will be outlined.

(1) Opportunities for Out-of-School Education

Figure 23. Rate of Participation in Social Educational Activities by Type of Activity, 1967



Note: Actual numbers are given in Basic Table 31.

1. The proportions are of those who have participated in the respective activities at least once during the month preceeding the survey (excluding such activities as watching TV, listening to radio or reading books.)
2. Physical education and sports activities include taking a walk, hiking, climbing mountains, playing baseball, etc.
3. Cultural activities include drama, music, dance, fine arts, literature, motion pictures, skills for daily life, and other artistic activities.
4. Classes and lectures includes attendance at classes and lectures related to vocational skills or techniques, skills for daily life, and general culture, and participating in volunteer activities.

The extent of participation of the people in physical and sports activities, cultural activities, and in classes and lectures is as shown in Figure 23.

The largest proportion of males participated in physical education and sports activities. In the case of females, however, there are no marked differences in the proportions by type of activity. For both males and females, with the exception of male participation in classes and lectures, the rate of participation is directly proportional to the type of region, the rate becoming higher as the city size increases. In terms of the rate of participation by age, older people tend to participate to a lesser degree, with the exception of females who are in the age-group corresponding to infant rearing period. The rate of male participation in cultural activities and physical education and sports activities varies little according to age. As for the rate by educational attainments, both males and females who have completed a higher level of education, participate more in all of the activities.

Trends in the number of persons who have attended various classes and lectures encouraged by the national and local governments as social education are as shown in Table 21.

Table 21. Trends in the Number of Persons Who Have Attended Classes or Lectures of Various Types Provided as Out-of-School Activities

(In thousands)

Year	Schools, classes and lectures				University extension	Social correspondence education
	Adults	Women	Youths	Total		
1963	2,853	3,748	426	7,027	64 (1)	228
1969	1,253	3,034 (2)	363	4,650	88	710

Note: (1) 1965
(2) 1968

In 1969 the number of persons who attended social education classes and lectures conducted by boards of education was 4,650,000, a decrease of 2,400,000 from 1963. On the other hand, the number of persons who participated in university extension programs tended to increase, as did the number of these provided with correspondence education authorized by the Ministry of Education, the latter increasing from 228,000 to 710,000.

Social education organizations whose main purpose is the training of their members have a total membership of 35 million as is shown in Table 22. The total number, however, has been decreasing.

Table 22. Number of Members of Social Education Organizations

Year	Boys' and girls' organization	Youths' organizations	Women's organizations	Adults' organizations(PTA)
1963	7,524	2,229	11,499	17,740 (1)
1969	7,329	2,363	9,528	16,300 (2)

Note: (1) 1962
(2) 1970

Educational broadcasting programs also play an important role in social education. The distribution of programs provided by NHK, by content, is shown in Table 23.

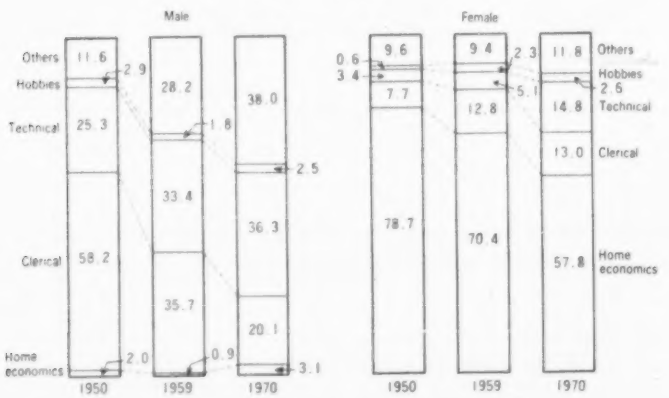
Table 23. Percent Distribution of Broadcasting Programs of NHK by Content, 1969

Category of broadcasting	Total	News	Education	Culture	Recreation
Radio:	%	%	%	%	%
AM Station 1	100.0	41.3	3.0	28.1	27.6
AM Station 2	100.0	10.5	72.4	16.1	1.0
FM	100.0	11.3	10.7	51.0	27.0
Television:					
NHK total	100.0	37.9	9.5	33.3	19.3
Educational channel	100.0	2.6	76.6	20.8	0.0

(2) Miscellaneous Schools

"Miscellaneous Schools" play an important role in providing the knowledge and techniques for occupations, home-making and general living which have become necessary with the changing times. Enrollments have been increasing yearly, reaching 1,410,000 in 1969, of which 1,000,000 were women. Comparison of the enrollment distribution by course in 1950, 1959 and 1969 shows that the proportion of males enrolled in clerical fields has sharply decreased, while the proportion in technical fields (industry, automobiles, medical technology, agriculture, etc.) has greatly increased. The proportion of women in the field of home economics has been decreasing, although it is still the highest, while the proportion in technical fields (hairdressing, nursing, teacher training, etc.) has increased remarkably.

Figure 24. Percent Distribution of Enrollment in Miscellaneous Schools by Sex and by Course, 1950, 1959 and 1970



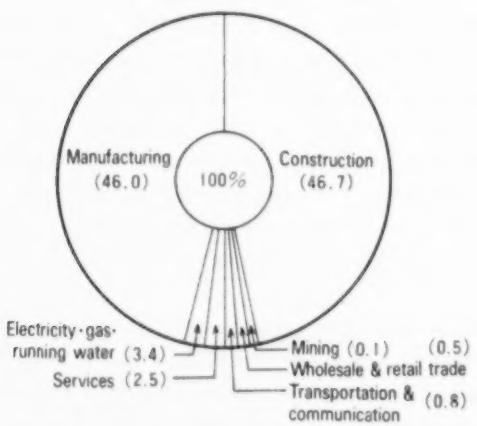
Note: Actual numbers are given in Basic Table 32.

(3) Other Types of Education and Training

Along with social education and miscellaneous schools, vocational training provided in publicly or privately maintained facilities, and training within industry offered by central and local public bodies or by private enterprises, are also playing an important role.

Vocational training is provided by public vocational training centers, under the supervision of the Ministry of Labor, and by centers participating in the so-called "authorized vocational training programs" (those programs provided by enterprises and juridical persons authorized by prefectural governors in accord with a Ministry of Labor directive). Their purpose is the training of skilled laborers, the maintaining and upgrading of their skills, or the re-developing of their abilities. As of 1969, there were 407 public vocational training centers, with the total enrollment of 106,000. In these centers, skilled laborers are being trained in occupations relating to machines, repair of automobiles, architecture, and drafting. As of April, 1969, 59,927 non-public training centers were providing authorized vocational training to 84,000 trainees. As shown in Figure 25, the highest number of these (39,000 or 47%) are in the fields of construction, and manufacturing (38,000 or 46%).

Figure 25. Percent Distribution of Trainees by Major Category of Industry



Note: Actual numbers are given in Basic Table 33.

Training within industry aims at developing the abilities of individual workers, whether this involves training newly recruited employees, educating middle level managers, top management or workers engaged in new technical fields, whether the worker is in a central or local public body, or in a private enterprise.

(4) Adult Education in Various Major Countries

In other major countries, adult education designed to give programs of general culture, vocational education, recreation, and sports to adults at large is provided by various institutions such as schools, labor unions, industrial organizations, and voluntary organizations. It is common for universities and other higher educational institutions to exercise leadership in the development and operation of adult education programs. In the U.S.A., many adult education classes are given at public high schools. This helps provide a variety of educational opportunities ranging from general culture to part-time continuing education aimed at supplementing vocational education or compulsory education. Many universities offer courses at the undergraduate and graduate levels in the evening so that employed people may attend a university and study whenever they wish without quitting work. In recent years, so-called two-year open door junior colleges have

been increasing in number throughout the country. They are playing an increasingly important role in adult educational activities in each community.

In England and Wales, activities in vocational education are well known. Among other things, there are further education on "the sandwich system" in educational institutions established and maintained by local education authorities; university extra-mural programs whose main aim is to offer a general education; and educational activities conducted by voluntary organizations such as Workers' Educational Assocation (WEA). There is currently a movement to integrate the various types of existing further educational institutions into approximately 30 comprehensive centers to be called "polytechnics". These are expected to serve as educational centers for adults and working youth in the areas in which they are to be located.

In France, adult education is being provided mainly through the evening classes of the National Industrial and Technical Institute and through the correspondence education and schooling of the National Correspondence Education Center both of which offer the educational opportunities needed to upgrade the occupational qualifications of workers. Recently, a national assistance plan for expanding and improving the in-service education of workers was developed, and in 1968 the CUEEP was set up at Lille University. Various experiments have been started on vocational and technical education for workers, to which increasing attention is being paid.

In West Germany, adult education lectures at universities have been providing workers with education, especially for general culture. In recent years, programs to prepare workers for obtaining various vocational and technical qualifications have also been offered. University extension programs are also being introduced.

In the U.S.S.R., adult education is conducted by universities and secondary technical schools in the evening or on a correspondence basis. In recent years, "Culture Universities", aimed at elevating the general culture of the community have been increasing. This system of education is given for one to two years (one to two days a week) by utilizing schools and cultural facilities.

CHAPTER II. IMPROVEMENT OF EDUCATIONAL CONTENT AND METHOD

1. Maintenance, Improvement and Diversification of Educational Content

(1) Curriculum

a. Development of Curriculum

(a) Basic principles of curriculum development and revision

Education in this country aims, as prescribed in Article 1 of the Fundamental Law of Education, at the full development of personality, striving for the rearing of the people, sound in mind and body, who will love truth and justice, esteem individuality, respect labor and have a deep sense of responsibility, and be imbued with the spirit of independence, as builders of a peaceful state and society. In accordance with this, the School Education Law sets forth the aims and objectives of elementary, lower secondary and upper secondary school education. To achieve these aims and objectives, each school develops its own curriculum in accordance with the standard course of study prescribed by the central government.

Since 1951, the standard course of study in our country has been revised several times to meet developments in society.

Similar procedures are employed for the development of curriculum in special schools for the handicapped and in kindergartens.

Table 24. Basic Principles of Curriculum Development and Points of Revision

a. Elementary and lower secondary schools

Year of enforcement	Area	Regulation regarding number of school hours per year	Characteristics of revision
1951	Teaching subjects Extra-curricular activities	Elementary Schools: Example of hours to be allocated Lower S. Schools: Minimum and maximum hours established	1. Enrichment of individual lives and development of the abilities of the individual to the fullest extent possible.
Elementary Schools: 1961 Lower Secondary Schools: 1962 (1958: moral education)	Teaching subjects Moral education Extra-curricular activities School events	Minimum number of hours established	1. Strengthening moral education. 2. Upgrading basic scholastic abilities and expanding scientific and technological education. 3. Improving aesthetic education. 4. Providing an education which can meet the future careers and personalities of pupils. 5. Integrating elementary and lower secondary education.
Elementary Schools: 1971 Lower Secondary Schools: 1972	Teaching subjects Moral education Special activities	Standard number of hours set	1. Harmonious and continuous development of pupils as human beings. 2. Development of personality, abilities and traits of pupils. 3. Careful selection of content of education. 4. Flexibility in the number of teaching hours. 5. Improvement of physical education and special educational activities. 6. Integration of elementary, lower secondary, and upper secondary education.

b. Upper secondary schools

Year of enforcement	Area	Required subjects		Characteristics of revision
		Number of subjects	Number of credits	
1951	Teaching subjects Extra-curricular activities	(All students) 6	40~38	
1956	Teaching subjects Extra-curricular activities	10 for all students	64~48 for general students 88~72 for vocational students	1. Providing differentiated general curriculum at the higher grades to meet the personalities and future careers of students in a more planned manner. 2. Giving flexibility to the numbers of teaching hours and credits. 3. Expanding content of courses in social studies, mathematics and science to lessen the unbalanced intellectual training of students. 4. Expanding arts and pre-vocational education in the general curriculum.
1963	Teaching subjects Extra-curricular activities School events	(For boys in general course) 17 (For girls in general course) 18 (Vocational courses) 14	74~68 76~70 52~47	1. Providing education which can meet the abilities, aptitudes and future careers of students by utilizing specific features of each course. 2. Increasing the number of required subjects to reduce the unbalanced training of general course students. 3. Strengthening moral education (Setting up a new subject "Ethics · Civics") 4. Upgrading basic scholastic achievements and improving scientific and technological education.
1973	Teaching subjects Educational activities other than teaching subjects	(For boys in general course) 11~12 (For girls in general course) 12~13 (For boys in vocational courses) 11~12 (For girls in vocational courses) 12~13	47 47 42 46	1. Increasing flexibility in curriculum development through such measures as reduction in the number of required areas and subjects. 2. Diversifying curriculum to meet the abilities and aptitudes of students. 3. Carefully selecting content of education and improving its quality. 4. Developing students harmoniously as a human beings. 5. Educating leaders of the nation and the society.

(b) Procedures of curriculum development

The central government prescribes, in accordance with the School Education Law and its Enforcement Regulation, the subjects to be taught and the number of school hours, in order to maintain nation-wide standards of educational content and to universalize public education. The government also publishes a course of study on curriculum standards to be complied with by each school, for the same purpose. The course of study is decided upon by the Minister of Education on the basis of the deliberations is recommendations submitted by the Council for Curriculum, which is comprised of teachers, researchers, and other learned and experienced persons.

Prefectures can set up their own standards as to school curriculum and administrative and operational matters by means of board of education regulations provided that these comply with laws and ministerial orders. Municipal boards of education also have legal discretion to make regulations governing curriculum to meet the specific situations of the areas for which they are responsible, presenting their basic educational policies, guidance and advisory services within the framework of national and prefectural standards.

Table 25. Procedures for Prescribing Curriculum Standards in Various Major Countries

Country	Role of central (state) government	Persons participating in the decision making process	Relationship with local government and schools	Remarks
Japan	The Ministry of Education prescribes courses of study and publishes them as government notices.	The Council for Curriculum, comprised of teachers, researchers, and other learned and experienced persons, determines the principles for curriculum revision.	Local standards are decided within the framework of national standards. Each school develops its curriculum in accordance with national and local standards.	
U.S.A.	Many states provide basic curriculum standards through state education laws and courses of study.	In many cases, committees comprising teachers and administrators decide standards.	Local boards of education decide, in accordance with state standards, the curriculum applicable to the districts for which they are responsible.	Binding power of standards are different from state to state.

Country	Role of central (state) government	Persons participating in the decision making process	Relationship with local government and schools	Remarks
England & Wales	Programs for religious education are prescribed. A Handbook for Teachers in publicly maintained primary schools is published.	Made by Inspectors in the Department for Education and Science.	Headmasters are responsible for the curriculum development of their own schools. Inspectors provide guidance and advice.	Nation-wide standards are maintained under the influence of inspection and examination systems.
France	The Ministry of Education decides the curriculum and publishes it as a ministerial order. (Original draft is written by the School Education Bureau of the Ministry of Education.)	Standards are decided through the deliberation of The Central Council on Education in which the Minister of Education, administrators, researchers, teachers, delegates of parents organizations and labor unions participate.	All schools throughout the country use the curriculum decided by the Ministry of Education. Changes can be made in consideration of local situations with the approval of the President of the University District.	
Germany (F.R.)	Each State Ministry of Education formulates instructional plans and publishes them as ministerial orders.	Deliberation is made by the committees comprising administrators and curriculum specialists in the Ministry of Education, and specialists outside the Ministry.	Within the framework of the instructional plans prescribing educational activities for all schools, adjustment may be made to meet special conditions in the school.	
U.S.S.R.	The Federal Ministry of Education decides curriculum and syllabus.	Deliberation is made by the Educational Science Academy.	All schools must comply with the curriculum and syllabus prescribed by the Federal Ministry of Education, although changes to meet the special situations of the community are permitted.	

On the basis of the curriculum standards prescribed by national, prefectural, and municipal governments, each school develops its own curriculum in consideration of actual conditions within the school and the community as well as of the physical and mental development levels and personalities of the pupils.

The procedures for curriculum development are different from country to country. In all countries, however, central or local educational authorities have some responsibility for curriculum development and play important roles in this regard.

b. Teaching Areas and Subjects

(a) Teaching areas and subjects in Japan

Eight subjects are offered by the elementary schools: Japanese language, social studies, mathematics, science, music, art and handicrafts, home-making and physical education. The lower secondary schools offer eight required subjects: Japanese language, social studies, mathematics, science, music, fine arts, health and physical education, and industrial arts or home-making, plus the following elective subjects: foreign languages such as English and French, and vocational subjects related to agriculture, trades and industries, business, fishing and home-making.

Upper secondary schools provide programs in such areas as Japanese language, social studies, mathematics, health and physical education, art, foreign languages, domestic arts, agriculture, industry, business, fishery, nursing, science and mathematics, music, and fine arts. These areas are sub-divided into nearly four hundred subjects. A new curriculum is to be employed in Japan beginning in 1971 in elementary schools, in 1972 in lower secondary schools, and in 1973 in upper secondary schools. Subjects will remain the same as those above, however their content will be somewhat changed.

(b) Teaching areas and subjects in various major countries

There are many differences between Japan and other major countries in teaching areas and subjects.

In the lower grades of elementary schools in European countries and the U.S.A., subjects are developed within broad general areas. For example in the U.S.A., social studies as offered in Santa Monica District in the State of California includes science, health and fine arts; and in the primary schools in Coringham County in England, English and mathematics are combined into one subject, while musical composition, literary composition, handicrafts and drawing are being taught as one area called "creative activities". In the Federal Republic of Germany,

Gesamtunterricht, which combines all subjects other than arithmetic and writing is common.

In the higher grades, teaching areas are differentiated into narrower subjects in several countries. In Japan, social studies for lower secondary education is divided into three areas: historical areas, geographical areas and civics areas, but in the England and Wales, France, West Germany and the U.S.S.R., curriculum differentiation begins at the level corresponding to the lower secondary school or upper grades of elementary schools in Japan so that the subject equivalent to Japanese social studies is differentiated into geography and history, while our science is divided into biology, physics and chemistry.

As regards national language instruction, reading, writing, hearing, speaking, grammar, and literature are taught in Japan in a comprehensive manner, while in many of the other countries, these instructional areas are taught independently of one other, or are combined into several groups.

Moral education is provided in Japanese elementary and lower secondary schools as a separate curriculum area. Among other major countries, however, only France provides moral education as a separate subject. In England and Wales and the Federal Republic of Germany, religious, if not moral education is offered instead. Labor education in the U.S.S.R. also aims at moral education.

c. Teaching Hours

(a) Regulations related to teaching hours

Teaching hours in Japanese elementary, lower secondary, and upper secondary schools are prescribed by the Enforcement Regulations of the School Education Law and by the government's courses of study.

The minimum number of school days per year is prescribed as 240, and the minimum number of weeks for the instruction of teaching subjects and morals is 35 (34 for the first grade of elementary schools). As for teaching hours in elementary and lower secondary schools, minimums had previously been prescribed, but in the latest revision, a standard number of teaching hours is presented instead of a minimum number. The standard length of one teaching hour is prescribed as 45 minutes for elementary schools and 50 minutes for lower secondary schools, but this standard length may be shortened to 40 and 45 mirutes respectively.

Table 26. Number of Weekly Teaching Hours, and Number of School Weeks and Days a Year in Various Major Countries

Country	Number of weekly teaching hours		Number of school weeks and days a year(1)	Length of one teaching hour
	Elementary schools	Secondary schools		
Japan	24~31 hours	Lower secondary schools: Grade I~II 34 hours Grade III 33 hours Upper secondary schools: 34 hours	Not less than 35 weeks (34 weeks for the first grade of elementary schools) 240 days (elementary and lower secondary schools only)	Elementary schools: 45 minutes (40 minutes) Lower secondary schools: 50 minutes (45 minutes) Upper secondary schools: 50 minutes
U.S.A. (San Diego, California)	Grades I~II: 1,425 minutes Grades III~VI: 1,525 minutes	20~33 hours	35~36 weeks 180 days (average)	53 minutes (average of the whole country)
England & Wales (One primary school example)	Grades I~II: 1,325 minutes Grades III~VI: 1,450 minutes	35 hours	Not less than 40 weeks 200 days	40~45 minutes
France	30 hours	24½~32 hours	36~37 weeks 180~185 days	Approximately 60 minutes
Germany (F.R.)	18~32 hours	31~32 hours	39 weeks Approximately 235 days	40~45 minutes
U.S.S.R.	Grades I~IV: 24 hours Grades V~VI: 30 hours	32~36 hours	34 weeks Approximately 200 days	45 minutes

Note: (1) Number of school days per week is six in Japan and the U.S.S.R. and five in the other countries.

The minimum number of teaching hours is decided by the central government in France and the U.S.S.R., and by the Ministry of Education in each state in West Germany. In the states of the U.S.A. and in England and Wales, the minimum number of school days per year is prescribed, but there are no regulations as to the minimum number of teaching hours.

(b) Number of teaching hours, by subject

In Japan the total standard number of teaching hours is relatively balanced among three groups of subjects; i.e., literary subjects, science-related subjects, and subjects related to arts and physical education. It is to be noted that more teaching hours are allocated to subjects related to music, fine arts, and physical education in Japan than in the other major countries.

Table 27. Number of Standard Teaching Hours per Year by Subject in Japan

a. Elementary schools

Grade	I	II	III	IV	V	VI	Total
Subject Area:							
Japanese	238	315	280	280	245	245	1,603
Social studies	68	70	105	140	140	140	663
Mathematics	102	140	175	210	210	210	1,047
Science	68	70	105	105	140	140	628
Music	102	70	70	70	70	70	452
Art & handicraft	102	70	70	70	70	70	452
Home-making	–	–	–	–	70	70	140
Physical education	102	105	105	105	105	105	627
Moral education	34	35	35	35	35	35	209
Total	816	875	945	1,015	1,085	1,085	5,821

b. Lower secondary schools

Grade	I	II	III	Total
Required subjects:				
Japanese	175	175	175	525
Social studies	140	140	175	455
Mathematics	140	140	140	420
Science	140	140	140	420
Music	70	70	35	175
Fine arts	70	70	35	175
Health & physical education	125	125	125	375
Industrial · Domestic arts	105	105	105	315
Moral education	35	35	35	105
Special activities	50	50	50	150
Elective subjects	140	140	140	420
Total	1,190	1,190	1,155	3,535

Looking ahead to figure 26, one sees that in the major countries, during the second year of elementary school, the largest number of teaching hours is allocated to national language instruction. This is especially striking in the U.S.A., England and Wales and the U.S.S.R. Mathematics is also given a considerably high percentage of teaching hours in the U.S.S.R. and West Germany. It is to be noted that in the U.S.S.R. social studies is not offered. In England and Wales and France, subjects other than those cited are given a very high proportion of teaching hours. This is due to the fact that in England and Wales religious education (12.1%) and in France self-study (16.7%) is provided.

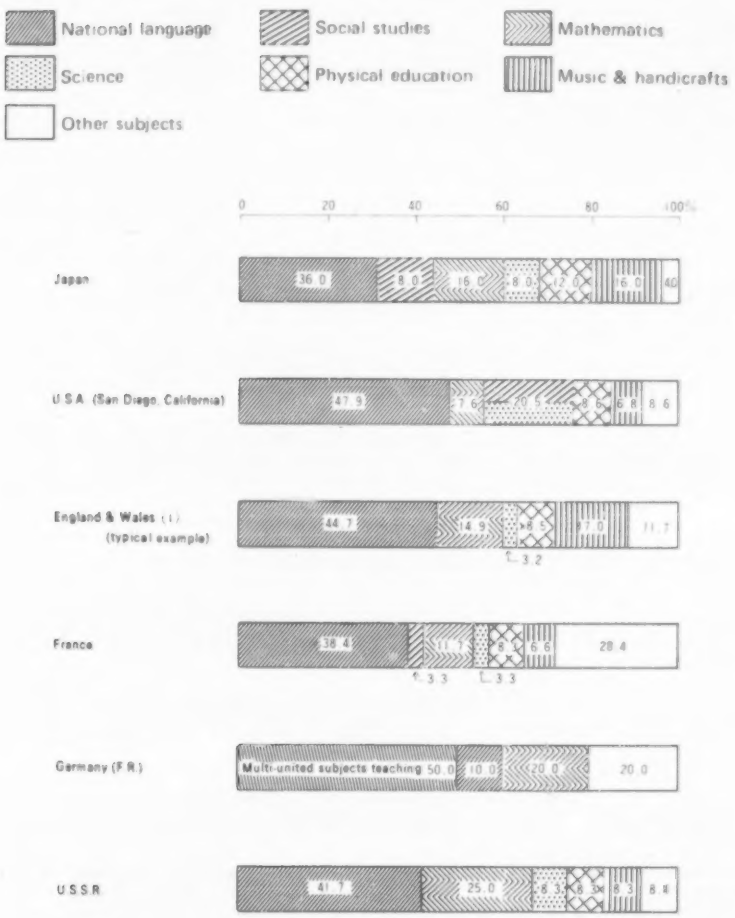
At the lower secondary level, teaching hours are distributed comparatively evenly among all subject in the U.S.A. and Japan, while in the European countries the subject upon which emphasis is placed differs from one country to another, with a non-uniform distribution of teaching hours among subjects. In the secondary modern schools of England and Wales and the Hauptschule of West Germany, both of which emphasize vocational education and practical activities, "other subjects" are given a proportionately large number of teaching hours.

At the upper secondary level, there are big differences in the distribution of teaching hours among subjects between countries and also between streams or departments within each country. The differences between streams or departments are especially marked in European countries. In Japan, an almost equal number of teaching hours are allocated to language-related subjects and science-related subjects in both general and vocational courses just as was shown to be the case at the lower secondary level. This shows that the allocation of teaching hours among areas in Japan is more balanced than in European countries.

Other recent trends in the secondary schools of other countries include an increase in the emphasis placed upon science, mathematics and foreign languages; an increase in the number of teaching hours allocated to physical education due to a rediscovery of its importance; considerable reduction in the emphasis placed on the classics and a decrease in the number of schools which require all students to complete such subjects. There are similar tendencies in Japan. In the new course of study for lower secondary schools the number of teaching hours allocated to mathematics and physical education has been increased by approximately 10% and 20% respectively over the numbers prescribed in the existing course of study.

Figure 26. Percent Distribution of Teaching Hours by Subject in Various Major Countries

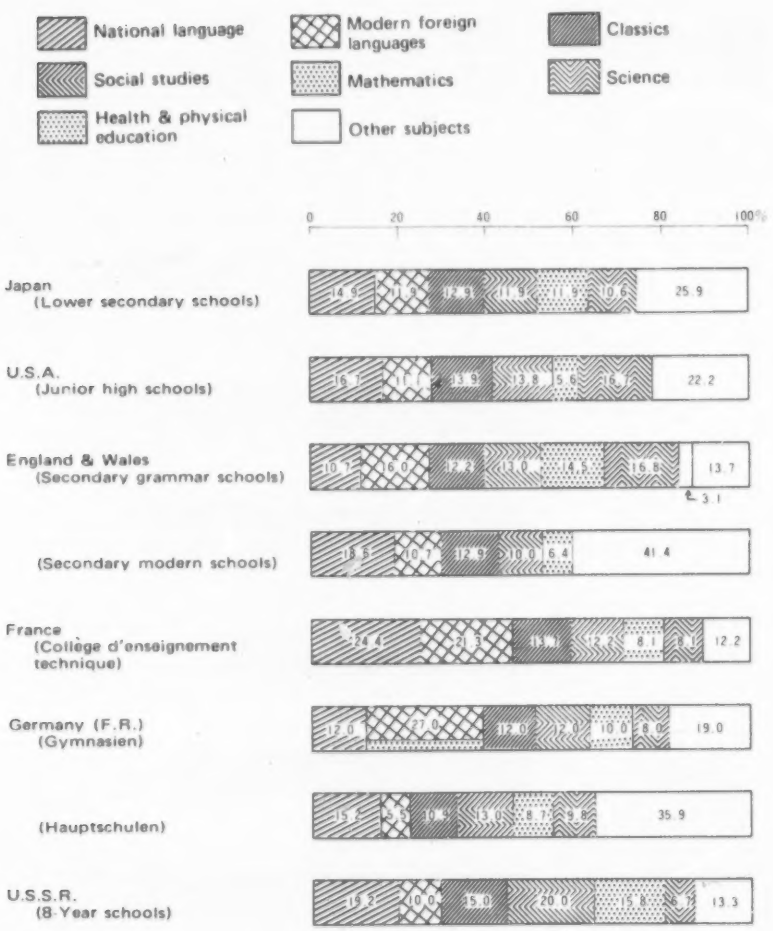
a. Elementary schools (Grade II)



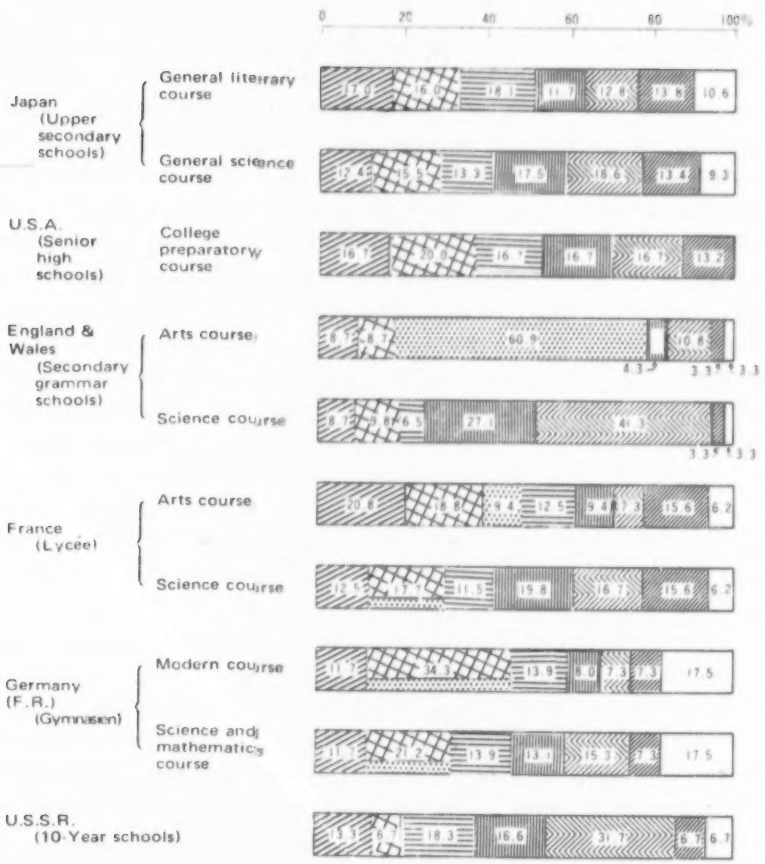
Note: (1) The third year of infant schools (seven years of age)

Figure 26. Percent Distribution of Teaching Hours by Subject in Various Major Countries —Continued—

b. Lower secondary education



c. Upper secondary education



d. Differentiation of Courses and Diversification of Curriculum Content

In Japan, with the exception of a few elective subjects, all students are provided with a common curriculum up to the end of the compulsory stage, i.e. elementary and lower secondary schools. Curriculum differentiation begins at the upper secondary school level. At this level, students are divided into such courses as general, agricultural, technical, business, fishery, domestic arts, and nursing.

In all courses of the Japanese upper secondary schools, many subjects are required for all students, and there is not sufficient room for student options. But in the new curriculum to be enforced beginning in 1973, the number of required subjects has been considerably decreased, and the degree of flexibility has been increased, especially in the general course. (For boys enrolled in the general course, the number of required subjects has been decreased from the present 17 to 11.) Further, the new curriculum includes such new subjects as 'basic science', 'general mathematics' and 'basic English' which aim at the acquisition of basic scholastic abilities; and comparatively advanced subjects in physics, chemistry, biology and geology, to permit students more freedom to choose areas and subjects in accordance with their interests, abilities and aptitudes. In the specialized courses, i.e., vocational, science and mathematics courses, such subjects as 'comprehensive mathematics', 'comprehensive physics' and 'comprehensive chemistry' which aim at improving the scientific and mathematical abilities of students, are also included. In addition to these subjects, such new courses as 'systems engineering' and 'programming' are to be offered in the technical and business courses respectively, so as to meet the progress being made in information sciences, especially in computers.

Course differentiation and diversification of curriculum in other major countries can be classified into three patterns, i.e., the American, the European and the Soviet. In the American pattern, there is no course differentiation up to the end of junior high school education. At the senior high school level, programs are differentiated in some localities, but in others comprehensive high schools in which students are provided with a common curriculum are in practice. In American secondary schools, the normal pattern is to provide education suited to the aptitudes and interests of students through a wide range of elective subjects rather than through course differentiation. In the European pattern, unlike the American pattern, students are divided after leaving the first level of school into different types of secondary schools, on the basis of examinations or scholastic achievements while in the first level of school.

In recent years, however, there has been a trend toward shifting the lower stage of secondary education from the traditional multi-track to a single-track system, thereby making the curriculum common to all students and in effect, putting off the period of differentiation until a later stage. In France, for example, the policy of making the curriculum common to all students at the lower stage of secondary education has been in practice since the 1970 school year. In the Soviet pattern the compulsory education curriculum is common to all pupils for eight years. After compulsory education the curriculum is differentiated into general and vocational courses. In the new curriculum announced in 1967, elective subjects were introduced for the seventh grade and beyond for the purpose of developing the abilities of individual pupils to the fullest extent possible.

As stated above, curriculum re-organization is the present trend throughout the world. In the European countries where education has traditionally been structured on the multi-track basis and the contents of education have been differentiated in a complicated way, the tendency is toward a unification of the curriculum at the lower stage of secondary education. On the other hand, in the U.S., the U.S.S.R., and Japan where a uniform curriculum had been employed, the introduction of a wide range of elective subjects and the differentiation of curriculum content is the trend. This latter aims at providing a wider choice of subjects by reducing the number of required subjects, thereby developing the abilities and aptitudes of individual students.

(2) Textbooks

a. Textbooks in Japan

Textbooks, i.e. officially approved books dealing with a definite subject of study, systematically arranged, are being used in Japan as a principal source of study material. It is legally stipulated that elementary, lower secondary and upper secondary schools must use textbooks.

Before the war, books other than textbooks were rarely used. Education was mainly textbook-oriented. After the war, the use of other appropriate books has enriched materials for study. Textbooks, however, are still important educational materials.

The authorization of textbooks, which has been in practice since 1948, aims at accrediting privately written and compiled books as textbooks. The authorization is made by the Minister of Education on the basis of the recommendations submitted

by the Research Council for Textbooks Authorization comprised of teachers, and other learned and experienced persons.

The adoption of textbooks is the responsibility of boards of education for public schools and of principals of each school for national and private schools. In the case of public elementary and lower secondary schools, the same series of textbooks is adopted for an area for which more than one board of education is responsible.

To pupils enrolled in compulsory schools, textbooks are distributed free of charge. The expenses for this are disbursed by the central government.

b. Textbook Systems in Various Major Countries

The analysis of the textbook systems in the countries for which data are available reveals that procedures for writing and publishing textbooks are widely different from country to country, depending upon the respective educational situations. In terms of the manner in which central or local authorities are involved in the preparation and publishing of textbooks, the procedures can be divided into three types.

In the first type, the central government publishes textbooks. In some cases these centrally published textbooks are compiled by either the central government or local governments. In others, one series is selected from among those textbooks which have been written by specialists according to criteria prescribed by the government, as in the U.S.S.R.

In the second type, textbooks are authorized or accredited by either central or local governments. In the Federal Republic of Germany each state conducts the same kind of authorization as in Japan. In France, local governments prepare lists of accredited textbooks. In the U.S.A. in general, either state or local governments

Table 28. Types of Preparation of Textbooks for Elementary Schools in Various Major Countries

Type		Countries
Published by the government	Central	The U.S.S.R., The Republic of Korea, The Republic of China, The People's Republic of China, The U.S.A. (California, etc.)
Authorization or Accreditation	Central (State)	Sweden, Spain, Japan, The U.S.A. (Florida, etc.), Switzerland (State), Germany (State)
	Local	Canada, France, The U.S.A. (Michigan, etc.)
Free publication		England & Wales, Italy, Netherlands, Australia ("Readers" are published by the central government.)

accredit textbooks. In some states, however, the state education laws provide that state authorities can publish all or part of the textbooks used.

In the third type, textbooks are published independently of public authorities. The U.K. is one such country. In some countries of this type, governments have the power to prohibit the publication of such textbooks that do no comply with national objectives in education.

Some countries supply compulsory school textbooks free of charge as does Japan. In France and some states of the Federal Republic of Germany, textbooks are lent free of charge. In the U.K., textbooks are kept at school for use by students. Many schools allow students to take them back to their homes. In the U.S.A., the pattern for supply is different from one state to another, but in many states, textbooks are either given or lent to students free.

(3) International Comparison of Educational Attainment (Arithmetic and Mathematics)

a. International Comparison of Educational Content in Arithmetic and Mathematics

In order to study educational attainments in various countries, it is necessary to compare educational content as well as the variations in subjects and teaching hours which have already been studied in the preceding section. Although available data is limited, an attempt will be made to compare and study the educational content covered in the subjects of arithmetic and mathematics as taught in schools at the compulsory education level in various major countries.

(a) Educational content in the first grade of elementary school

In the countries considered, instruction in arithmetic starts with counting numbers of concrete objects, such as flowers and fruits, aiming at enabling pupils to count up to one hundred by the end of the first year, and addition and subtraction up to 20 is the central objective of calculations. In Japan, addition and subtraction up to one hundred is taught in the first grade, but additions in which the sum of the first order figure exceeds 9 or subtractions in which the first order figure of the minuend exceeds the first order figure of subtrahend are not included. Besides such addition and subtraction, simple multiplication and division are also taught in some countries. In France, multiplication of first order numbers and simple division are taught; in the U.S.S.R. division of numbers up to 20 and in the U.S.A. the concept of 1/2 are also taught. In Japan, division is not specifically taught, but the fundamental basis for multiplication and division is provided by instruction

regarding groups of things and their equal division with the help of concrete objects.

Measurement of common objects is taught, starting with length and volume. In the U.S.A. and the U.S.S.R., pupils are educated to the extent that they understand such units as are commonly used in daily life. On the other hand, in France, West Germany, and Japan, pupils are instructed only to the extent that they understand the concept of quantity. In the U.S.A. and Japan, 'reading of clocks' is included in the curriculum. It, however, is at a rather simple level such as 'three o'clock' or 'half-past four'.

Basic shapes are also included in the curriculum in several countries, although very briefly, while recently the elementary concept of set is being covered in France, the U.S.S.R. and Japan.

Table 29. Educational Content Related to Calculation in the First Grade in Various Major Countries

	Japan	U.S.A.	France	Germany (F.R.)	U.S.S.R.
Content	* Addition and subtraction up to 20. * Addition and subtraction of two figures up to 100, excluding additions in which the sum of the first order figures exceeds 9 and subtractions in which the first order figure of the minuend exceeds the first order figure of the subtrahend.	* Addition and subtraction up to 18. * Understanding of the concept of 1/2.	* Addition and subtraction of two figures. * Multiplication of simple single figures. * Simple division.	* Addition and subtraction up to 20.	* Addition and subtraction up to 20. * Multiplication and division of single figures up to 20.
Examples	9 + 9 15 − 6 56 + 43 78 − 36	9 + 7 13 − 7 1/2 of 18	45 + 50 16 − 7 2 × 3 24 = □ × 4	19 − 9 8 + 6	8 + 7 14 − 6 5 × 3 16 ÷ 2

Note: Further examples are given in Basic Table 34 in the Japanese edition, however, it is not included in the English edition.

(b) State at which the main elements of arithmetic are begun

In this section, the stage at which the main elements of arithmetic are begun will be studied briefly.

Almost identical tendencies can be seen in all the countries selected. In the U.S.A., however, basic shapes are not included in the curriculum to any noticeable degree. Factoring is taught in the U.S.S.R. in the sixth grade (corresponding to the first year of lower secondary school education in Japan.). In Japan, however, this is started in the third grade of lower secondary schools.

Table 30. Grade in Which Various Elements of Arithmetic and Mathematics Are Begun in Various Major Countries

Content	Japan	U.S.A.	France	U.S.S.R.
Units of length	2	1	1	1
Addition and subtraction of two figures beyond 19	1	2	1	2
Multiplication	2	2	1	1
Three figures × Two figures	3	4	2~3	3
Addition and subtraction of fractions	3	4	4~5	3
Powers	7	8	7	6
Speed	5	3	6	3
Percentage	5	5	6	5
Negative numbers	7		8	5
Equations	7	7	8	6
Inequalities		9	8	7
Factoring	9	8	8	6
Triangles	2		2	2
Area of circles	5		4~5	4
Congruence of triangles	4	8	7	5

Note: Compulsory education begins at the age of seven in the U.S.S.R., and at six in the other three countries. In the U.S.A., however, it begins at the age of five in some parts of the country.

(c) Special features within countries

The content of education at the elementary stage is almost the same in all the selected countries, although the stage at which the respective elements are begun is different from country to country. At the level of secondary education, however, each country has special features. These special features at the lower stage of secondary education are as follows.

Mathematics has been regarded as increasingly important and its content has been improved in various countries. In the U.S.A., emphasis has recently been

placed on the systematic study of mathematics in order to help students develop basic scholastic abilities. Research on the modernization of mathematics teaching is rigorously being made. In the newly revised course of study in Japan, improvements will be made from the viewpoint of modernizing mathematics education. For example, 'set' will be included in the curriculum for the first grade of lower secondary schools, set structure, permutations, combinations and probabilities for the second grade, and sample surveys for the third grade.

In France, it is to be noted that practical measurement training called 'practice' is specifically provided in secondary schools. In France and the U.S.S.R., solid geometry and vectors are being taught. Pupils are also introduced to trigonometry in these two countries.

Many countries have recently felt it necessary to achieve modernization of mathematics education and research on the introduction of abstract and applied mathematics at earlier stages in pupils' development are extensively being made.

b. International Study of Educational Attainment in Mathematics

The aim of this section is to make an international comparison of educational achievements in mathematics based on the results of the International Study of Educational Attainment (IEA) conducted in 1964 under the leadership of the Unesco Institute for Education, Hamburg.

In terms of educational achievements in the grade having the highest

Table 31. International Comparison of Educational Attainment in Mathematics

Country	Score in grade which included the largest number of 13 year olds (Full mark: 70)		Score in grade immediately preceding university entrance (Full mark: 69)			
			Students for whom mathematics is a major subject		Other students	
	Average	Ranking	Average	Ranking	Average	Ranking
Israel	32.3	1	36.4	1	–	–
Japan	31.2	2	31.4	6	25.3	3
Belgium	30.4	3	34.6	3	24.2	5
Germany (F.R.)	25.5	4	28.8	7	27.7	1
U.K.	23.8	5	35.2	2	21.4	7
Scotland	22.3	6	25.5	9	20.7	8
Holland	21.4	7	31.9	5	24.7	4
France	21.0	8	33.4	4	26.2	2
Australia	18.9	9	21.6	11	–	–
U.S.A.	17.8	10	13.8	12	8.3	10
Finland	16.1	11	25.3	10	22.5	6
Sweden	15.3	12	27.3	8	12.6	9

proportion of thirteen year old pupils (the second grade of lower secondary schools in Japan) Japan ranked second to Israel among the twelve countries which participated in this project. As for students at the stage immediately preceding university entrance (the third grade of upper secondary schools in Japan), those students for whom mathematics is a major subject (in the case of Japan, students who completed not less than five credits of 'mathematics III' or 'applied mathematics') ranked sixth among the twelve countries, and non-mathematics majors ranked third among ten countries.

These rankings may be affected by differences in enrollment ratios. In Figure 27, in order to control for this factor, the educational achievements of the top 3 or 4% of students in the age group corresponding to the stage prior to university entrance is compared. According to this method of comparison, the average attainment of Japan can be ranked in first place.

These figures all show that the educational attainment in mathematics in Japan is high on the average. But the attainment by individual students varies widely. This may be due to the comparatively high enrollment ratio in Japan. However, this

Figure 27. International Comparison of Educational Achievements in Mathematics

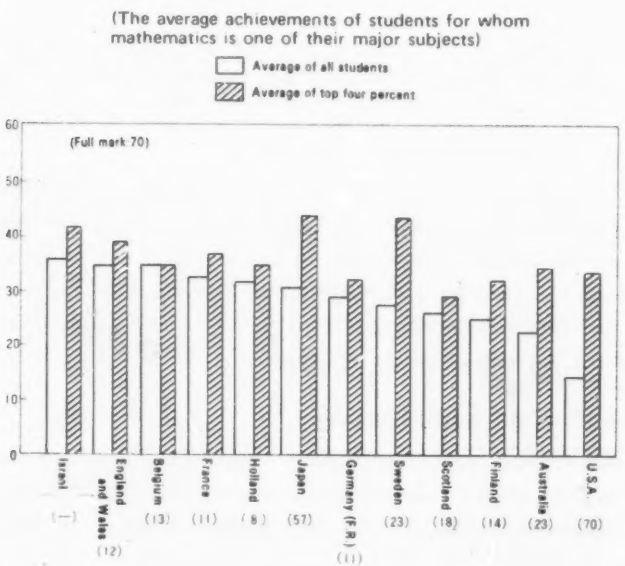
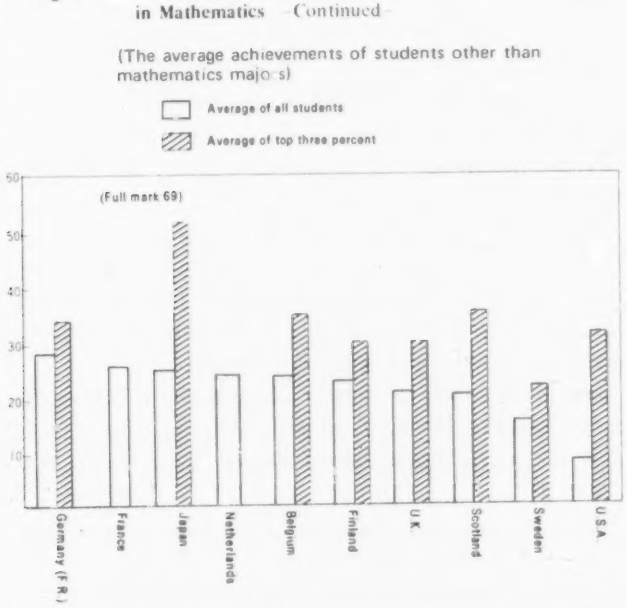


Figure 2-7 International Comparison of Educational Achievements in Mathematics —Continued—



Note: 1. Numbers in parentheses show enrollment ratios (%) in 1964 at the stage immediately preceding university entrance. Enrollment ratios are not available for Israel.
2. Attainment of the top 3% are not available for France and the Netherlands.

suggests the necessity to provide a wide variety of curriculum in the future for those students with scholastic achievements widely different from one another. The analysis of educational attainments by instructional area also reveals that achievements in areas related to mathematical thinking were inferior in Japan to those in the other paricipating countries. Therefore, improvement of this aspect of education is a task to be tackled in the future.

(4) Education in Foreign Languages

In recent years, with scientific and technological developments, and the increase in international cooperation and international understanding, increasing importance has been attached to foreign language teaching at the elementary and secondary education levels.

In Japan, foreign language teaching starts in lower secondary schools, for the purpose of "developing the basic abilities of pupils to understand and speak foreign languages, deepening pupils' consciousness of language, and establishing the foundation for international understanding". Although foreign languages are not required subjects, a great majority of pupils study English.

Foreign language teaching starts at an earlier stage in other countries than in Japan. In the Federal Republic of Germany, it starts at the age of ten. In England and Wales, France and the U.S.S.R., it is a required subject starting at the age of eleven. In the U.S.A., elementary schools which teach foreign languages are rapidly

Table 32. Weekly Number of Foreign Language (Modern Language) Teaching Hours

Country	Age 9	10	11	12	13	14	Grade in which foreign language teaching starts	Remarks
Japan				[3]	[3]	[3]	VII	English
U.S.A.	75(1)	75	75 75(2)	120(3) 150	120 150	[300]	IV	Usually, Spanish or French. (In Hawaii and the State of California, the Japanese language is also taught.)
England & Wales			5(4) [6](5) 5(6)	4 [5] 5	4~5 [6] 4	4~8 [6] 4	VII	French, German, Spanish, Russian
France			4	4	3~6	3~6	VI	English, German, Italian, Spanish, Arabian
Germany (F.R.)		4(7)	4	3.	3	3	V	English, French, Russian, Italian, Spanish
U.S.S.R.			4	3	3	2	V	English, German, French, Spanish, Chinese

Note: [ ] means elective subjects. Numbers for the U.S.A. are in minutes, while numbers for the other countries are in hours.
(1) Winona Public Elementary School in the State of Minnesota.
(2) Santa Monica School District in the State of California.
(3) Junior high schools in the State of Iowa.
(4) Secondary modern schools for boys near London.
(5) Co-educational secondary modern schools.
(6) Secondary technical schools near London.
(7) Nordrhein-Westfalen.

increasing in number. In the countries considered, foreign language teaching is provided by the age of eleven at the latest. On the other hand, it starts at the age of twelve in Japan.

Foreign language teaching is provided as an elective subject in some junior high schools in the U.S.A. and in secondary modern schools in England and Wales. Generally, pupils are required to take one or two foreign languages, and it is even possible to take more than two foreign languages in the countries considered.

In vocational programs at the upper stage of secondary education, foreign languages are usually elective.

The method of teaching foreign languages has been changing in recent years from grammar-centered to practical usage emphasizing hearing and speaking before reading. Teaching foreign languages without use of the mother tongue has also been employed to a considerable extent.

Foreign languages are ususally taught to smaller groups than is the case in other general subjects. For example, in France and the U.S.S.R., the size of class for foreign languages is below 23.

In the U.S.A. and the U.S.S.R., special education is provided for the gifted. In the U.S.S.R., special schools exist to teach English and French to children during and after the second grade.

(5) Extra-Curricular Activities

Extra-curricular activities in Japan aim at the harmonious development of mind and body through desirable group activities and at the development of personality and practical attitudes for improving life. The activities are somewhat different from one school level to another, but the most common are "student government", "home-room activities" "club activities", "class-room guidance" and "school events". These activities play an important role in deepening human relationships between teachers and pupils and among pupils.

In the new course of study, all pupils in lower secondary schools are required to participate in "club activities". The number of hours to be allocated weekly to this kind of activity has been increased to 50, 15 hours over the existing course of study. "home-room activities" and "club-activities" in the upper secondary schools will also be required for all students. The number of hours to be allocated to these activities is prescribed as not less than one credit hour per week for both "home-room activities" and "club-activities".

Next, extra-curricular activities in the various major countries will be studied.

Although these activities are conducted in different forms in different countries, most countries commonly consider extra-curricular activities important as opportunities for human development, and are making efforts to improve facilities and to train leaders for this purpose.

In the U.S.A., extra-curricular activities are usually provided as an integral part of school programs as in Japan. On the other hand, in European countries, these activities have traditionally been provided as a part of community activities, utilizing equipment and facilities outside of school.

The main activities in the U.S.A. are "home-room activities", "student government activities" and "club-activities". "Club activities" in particular are very actively conducted. There are many "club activities" which involve all schools in the nation. In some schools,"club activities" are incorporated into the regular time-table. For example, credits are provided for some activities such as the school newspaper.

Group sports which have traditionally been performed in public schools (maintained privately) are one of the special features in England and Wales. These group sports are now being given an increasing emphasis in other schools. In addition, various other kinds of sports and cultural activities are conducted as extra-curricular activities.

Schools in France have so far placed emphasis upon the intellectual training of students. In recent years, however, the importance of extra-curricular activities has increasingly been recognized. It is to be noted that teachers who are professionally qualified are responsible for these activities and that activities are conducted which involve the whole community.

In the Federal Republic of Germany, the pupils' consciousness of solidarity is developed through student government activities and classroom activities. Not only facilities for sports and physical education, but also *Landerziehungsheimen* are set up throughout the country.

Extra-curricular activities in the U.S.S.R. fall into club activities, school events, and out-of school educational activities which utilize educational and cultural facilities outside of school. These activities play an important role in school education. In contrast to these activities, boys' group activities such as the "pioneers" also play important roles. The "pioneers" which aim at developing communistic men through group living are formed by pupils in grades III to VIII. A very high proportion of pupils are members of the pioneers. Its activity level is high and it plays an important role in human education.

2. Improvement of Teaching Methods

The recent quantitative expansion in education, the increasing demand for qualitative improvements in education, especially for individualized learning, and the development of teaching machines as one product of the general scientific and technological developments, all necessitate innovation in the traditional methods of education.

The sections which follow deal with such innovative changes in the methods of education.

(1) Introduction of Teaching Machines

In addition to pictures, models, slides, radios, and motion pictures, which have been traditionally used as instructional means, new kinds of educational machines have come to be employed in recent years. Such machines as television, tape recorders, and overhead projectors (OHP), which had not been used in classrooms until recently, are being introduced into daily educational activities. More recently, the direct or indirect utilization of computers for educational activities is being studied in many countries of the world. Among others, CAI (Computer Assisted Instruction) and CMI (Computer Managed Instruction) are being rigorously studied and developed. In July, 1970, an International Seminar on the Uses of Computers in Education was held in Japan. In Japan, the use of computers together with response analysis apparatus is being studied, and it is expected to contribute considerably to the improvement of instruction. At present, approximately 140 universities have computers. In a few elementary, lower secondary and upper

Table 33. Percent of Public Elementary, Lower Secondary, and Upper Secondary Schools Equiped with Educational Machines, 1969

Educational machines	Elementary	Lower secondary	Upper secondary
	%	%	%
Slide projectors	91	89	94
8 mm projectors	64	62	74
16 mm projectors	40	34	80
Overhead projectors	16	26	62
Tape recorders	95	97	94
Television sets	84	70	70
Radio receivers	80	58	–
Video tape recorders	3	6	16
Language laboratories	–	3	4

Note: Actual numbers are given in Basic Table 35.

secondary schools, computers are being used to experiment with individualized instruction or information management training.

The proportion of schools equipped with television sets, tape recorders, slide projectors, 8 mm projectors and other educational machines is very high.

In addition, such new devices as language laboratories, VTR, and response analysis apparatus have been introduced in recent years. Although the proportion of schools furnished with these machines is still low, the rate of increase is rapid. In the future, when these machines have been furnished in most schools, effective usage of them will become an important problem.

The proportion of schools equipped with various kinds of educational machines is especially high in the U.S.A. For example, there is an average of one overhead projecter per 101 public elementary and junior high school pupils. On the other hand, in Japan the figure is about one twentieth of this, i.e. one per 1,949 pupils. The number of pupils per 8 mm projector in the U.S.A. is 778 as against 1,132 in Japan. The number of pupils per slide projector is 107 in the U.S.A. as against 231 in Japan.

(2) Improvements of Teaching and Learning Organizations

Along with the introduction of educational machines, various attempts to reform traditional uniform teaching and learning organizations are being made. The trend is toward individualizing teaching and learning to meet the wide variety of abilities and aptitudes of students instead of adjusting the level of instruction to the average student as has traditionally been the case.

The newly revised course of study in lower secondary schools emphasizes the strengthening of education to meet the abilities and aptitudes of students. Especially in mathematics and foreign languages, provisions exist to allow the content to be changed according to the abilities of students. In addition, part of the curriculum content may be omitted in any subject area for slow learners, such cooperative instructional organizations as team teaching and exchange teaching are to be introduced, and appropriate audio-visual materials are to be selected and used.

The new upper secondary school course of study also provides new areas and subjects for the purpose of promoting education to meet different student abilities and aptitudes.

The following are some of the new attempts to improve the organization of instructional and learning now being made in various major countries, especially in the U.S.A.

Team teaching as it exists today was started in the U.S.A. about fifteen years ago. Team teaching enables individual teachers to demonstrate their abilities through the formation of groups. Therefore, it has been developed as a method to meet growing complexity and diversification of educational content. As of 1966, approximately 38% of the elementary and secondary school districts in the U.S.A. were employing this method.

There is also a new system called 'nongraded schools' in which grade lines are eliminated to enable pupils to undergo educational experiences according to the pupils' speed of achievement and thereby to provide instruction to meet the abilities and aptitudes of individual pupils. As of 1966, 23% of all school systems were practicing the nongraded system.

The modular scheduling plan which uses computers to prepare individual time-tables for students according to their differences, with 20 to 30 minutes as the basic teaching unit, is also an example of a flexible method of education to meet the abilities and aptitudes of individual students.

The 'dual progress plan' is a scheme in which teaching areas are divided into two sub-areas, required and elective. For the required subject areas the graded system is employed and for the elective, the nongraded. This plan is being tried in many states such as New York and Florida.

The tendency toward educational innovations is not a monopoly of the U.S.A. Traditional methods of education are being reappraised and new teaching and learning devices are being developed in the European countries, too. There children have traditionally been sorted into different schools according to their abilities at comparatively early stages of development. But increased reflection on the fact that individual abilities have been insufficiently developed has led to a recent movement toward individualizing instruction.

In Britain, ability grouping called 'streaming', in which pupils in the same grade are divided into "forms" based on their general ability, aptitudes and future career prospects is widely in practice. In recent years, however, new attempts such as the grouping system, in which pupils of two to three age groups are combined into one class, and the formation of small groups called 'family groups', both of which aim at adjusting educational activities to pupils' abilities and interests, are being introduced in some regions.

In the Federal Republic of Germany, ability grouping has also been employed in the upper grades of comprehensive secondary schools. Since about five years ago

this has been increasingly used for such main subjects as national language, mathematics and physics.

Along with such changes in the methods of education, school buildings are also being revised. For example, in the U.S.A., the traditional type of rectangular classroom with fixed walls, has increasingly been replaced by large pentagonal or hexagonal classrooms which can be sub-divided by movable walls into rooms of various sizes according to the objectives of the particular educational activity.

In addition to improvements in the methods of education, national policies for developing the abilities of gifted children to the fullest extent possible are being shaped in the U.S.A. and the U.S.S.R.

In the U.S.A., there has been a growth in cooperative arrangements between colleges and high schools called the 'advanced placement program' designed to enable bright students to take college level courses while still in high school and to give college credits to those who complete them. As a provision for gifted students, the National Merit Scholarship Program was started in 1955, which conducts competitive tests for scholarships thereby giving financial assistance to students who might otherwise be unable to continue their education.

In the U.S.S.R., uniform teaching methods had traditionally been in practice. Since 1960, however, secondary school students talented in such specific subjects as mathematics, physics, chemistry, and foreign languages are enrolled in special schools and provided with a higher level of instruction than in ordinary schools. In the University of Moscow, the University of Leningrad and some other prestigious universities, special schools of particularly high quality are attached, providing college level education to gifted students selected throughout the country by a special procedure called the 'olympiad'.

3. Pupil Guidance

(1) Pupil Guidance in Japan

a. Scope of Pupil Guidance

Pupil guidance is one of the important functions whereby a school achieves its educational objectives. Its aim is to improve the pupils' social traits and behaviour as well as to develop the personality, character and ability of individual pupils. It is designed for the better development of individual pupils rather than specifically to prevent problem children or delinquents. It should result in making school life

meaningful both to individual pupils and to groups such as classes, grades and the whole school. It covers educational, personal, social, moral, vocational and health guidance among others and is usually provided for each of these areas separately, but for the better development of the pupil's personality, all of these areas of guidance should be conducted in a comprehensive manner.

Each school must have teachers specifically responsible for pupil guidance, vocational guidance, and health guidance. The Five-Year Plan started in 1969 requires that lower secondary schools with eighteen or more classes be given favorable consideration in terms of the number of teachers, in light of the load of teachers responsible for pupil guidance.

The central government has been conducting lecture courses on pupil guidance, training courses for lower secondary school counsellors, and courses on vocational guidance to upgrade the competence and skills of teachers responsible for guidance. However, the further development of competent guidance teachers is becoming an important task.

Table 34. Number of Teachers Responsible for Pupil Guidance in Public Elementary, Lower Secondary and Upper Secondary Schools, 1969

Level of school	Pupil guidance	Vocational guidance	Health guidance	(Total number of schools)
Elementary schools	640	–	17,117	(25,013)
Lower secondary schools	1,890	6,703	8,076	(11,278)
Upper secondary schools	500	2,162	2,364	(4,817)

b. Orientation, Vocational Guidance and the Careers of Lower and Upper Secondary School Graduates

According to the results of the 'Survey on the Academic and Occupational Careers of School Graduates' conducted in 1968, 77% of the lower secondary school graduates went on to upper secondary schools, and 17% entered employment; 25% of the upper secondary school graduates went on to higher educational institutions, and 56% of them entered employment; while 6% of the lower secondary school graduates and 19% of the upper secondary school graduates failed either to be admitted to higher level educational institutions or to find employment.

Of lower secondary school graduates who went on to upper secondary schools, 24% applied for admission to schools not of their first choice and 14% went on to schools other than those chosen as a result of orientation guidance.

Table 35. Relationship between 'Schools of First Choice', 'Schools Applied to as a Result of Orientation Guidance' and 'Schools to Which Actually Admitted'—Lower Secondary Level

Relationship between 'schools of first choice' and 'schools applied to as a result of orientation guidance'			Relationship between 'schools applied to as a result of orientation guidance' and 'schools to which actually admitted'		
Schools of first choice	Congruent	Not congruent	Schools applied to as a result of orientation guidance	Congruent	Not congruent
	Percent (Educational attainment)	Percent (Educational attainment)		Percent (Educational attainment)	Percent (Educational attainment)
Public upper secondary schools:	%	%	Public upper secondary schools:	%	%
General	78.0 (3.9)	22.0 (3.2)	General	88.3 (4.0)	11.7 (3.4)
Technical	70.1 (3.4)	29.9 (3.0)	Technical	82.7 (3.5)	17.3 (2.9)
Business	69.5 (3.4)	30.5 (3.0)	Business	78.0 (3.5)	22.0 (2.8)
Others	71.3 (3.1)	28.7 (2.7)	Others	80.9 (3.2)	19.1 (2.8)
Private upper secondary schools:			Private upper secondary schools:		
General	88.5 (2.7)	11.5 (2.9)	General	93.7 (2.8)	6.3 (3.0)
Vocational	86.9 (2.4)	13.1 (2.6)	Vocational	92.5 (2.5)	7.5 (2.6)

Note: Numbers in parentheses show average grades based on the five-scale evaluation system.

Of those upper secondary school graduates who wished to go on to institutions of higher learning, only 51% succeeded in getting admitted to the universities or junior colleges of their first choice, 29% failed to be admitted to any institution, and 12% did not apply for admission to higher educational institutions and either entered employment or remained unemployed.

Table 36. Percent Distribution of Full-Time Upper Secondary School Graduates by Career

Type of institutions where entry sought	Students who succeeded in getting admitted to institution of first choice	Students who entered institution other than those of first choice	Students who failed to be admitted to any institution	Students who entered employment and others
	%	%	%	%
Total	51.1	8.0	29.4	11.5
National universities	27.7	13.1	47.6	11.6
Local public universities	13.0	23.2	51.3	12.5
Private universities	61.6	4.4	25.4	8.6
Public junior colleges	24.1	18.3	10.3	47.3
Private junior colleges	84.7	1.0	2.0	12.3

According to a study conducted by the Ministry of Labor, more than half of lower and upper secondary school students who graduated and entered employment in 1966 left their first job within three years after graduation.

Table 37. Percent of Employed Lower and Upper Secondary School Graduates Who Left Their First Job within Three Years after Graduation

Years after graduation	1966 Graduates		1967 Graduates		1968 Graduates	
	Lower secondary	Upper secondary	Lower secondary	Upper secondary	Lower secondary	Upper secondary
	%	%	%	%	%	%
1	23.4	25.7	22.6	25.2	19.4	22.5
2	17.5	15.8	16.2	15.6	–	–
3	12.6	11.5	–	–	–	–
Total	53.5	53.0	38.8	40.8	19.4	22.5

This situation suggests that orientation and vocational guidance activities should be further improved and expanded in lower and upper secondary schools.

(2) Pupil Guidance in Various Major Countries

The importance of pupil guidance is also recognized in the U.S.A. and other countries. Arrangements for specialists such as counselors and school psychologists are made by schools and by local boards of education. All countries are concerned with pupil guidance problems which have been become increasingly important year by year.

In the U.S.A. schools and local boards of education have professional 'guidance counselors' assigned to such services as (1) assessing abilities and aptitudes of individual pupils and maintaining cumulative records for each individual as the basis for counseling, (2) collecting and providing data which can assist individual pupils in educational and vocational planning, (3) providing counseling, (4) conducting group guidance, and (5) providing placement guidance.

Counselors are recruited from among university graduates with majors in psychology and other professional subjects. As of 1965, there were 33,646 guidance counselors and 3,890 school psychologists. At the secondary school level, there was one counselor for every 508 students in grades seven to twelve.

In England and Wales some secondary schools have specialists in pupil guidance called 'counselors' or 'young tutors'. Their total number, however, is still very small. These specialists are employed from among teachers who have comparatively long teaching experiences as well as strong interests in counseling, or from among those

who have completed courses at universities or teacher training schools specifically designed for the training of counselors. Counselors provide assistance and advice to pupils regarding personal, educational (notably selection of subjects and courses) orientation and vocational problems.

In France, specialists in pupil guidance are found in public "Educational and Vocational Guidance Centers" set up in each country and in each secondary school. These specialists are required to pass national examinations after having received a professional education at national centers for the training of guidance counselors or at research institutes of psychology attached to universities. In addition, there is a guidance system at the lower stage of secondary education called 'Observation and Guidance Period'. This system is designed to provide 4 years of systematic educational guidance services by keeping curriculum diversification to a minimum, thereby providing common programs to all pupils at this stage enabling detailed observation of the abilities and aptitudes of individual pupils.

In the Federal Republic of Germany, pupil guidance specialists are also called counselors, and are found in each school. University graduates who specialized in psychology and other professional subjects can be qualified as counselors. They are assigned to teaching duties but to a lesser extent than ordinary teachers. Counselors not only provide educational and vocational guidance in special guidance rooms, but also make direct observations as specialists, the task of which is assigned by classroom teachers.

4. School Health and School Lunch Programs

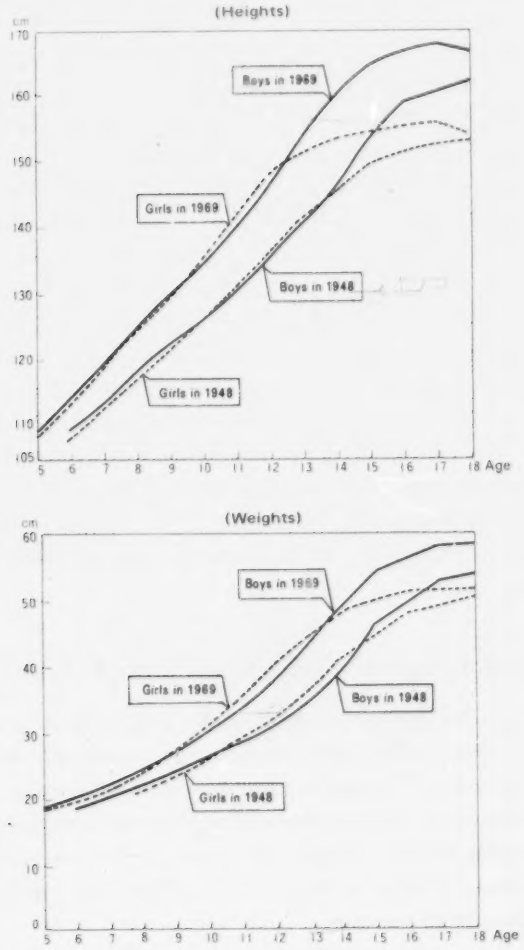
If the balanced development of pupils' minds and bodies is to be promoted, and customs and attitudes necessary for pupils to enjoy healthy and safe lives are to be developed, it is necessary to provide guidance in physical education throughout the activities of the school. This section outlines, first, the present situation as to the physical features, physical strength and athletic abilities of pupils, and then presents the present problems to be solved in school health programs, safety education and school lunch services.

(1) Physical Features, Physical Strength and Athletic Abilities of Pupils

a. Physical Features of Pupils

The recent improvements in the physical features of Japanese children are remarkable. Figure 28 compares heights and weights of children in 1949 with those

Figure 28. Comparison of Heights and Weights in 1948 with Heights and Weights in 1969



Note: Actual numbers are given in Basic Table 36.

in 1969 by age in order to make clear the age at which the largest increases in heights and weights have occurred.

Average height has increased during the twenty year period by 5.6 centimeters

for first grade boys and 5.7 for first grade girls. Differences during the twenty year period increase with age, reaching a peak of 13.0 centimeters for boys and 11.0 centimeters for girls at ages 12–15, decreasing thereafter to 4.4 centimeters for boys and 1.7 centimeters for girls at the age of 18. These facts reveal that the present first graders are as tall as pupils in the second or higher grades twenty years ago and that pupils in the first year of today's upper secondary schools are already as tall as adults of twenty years ago.

b. Physical strength and athletic abilities of pupils

The survey on people's physical strength and athletic abilities by the Ministry of Education reveals that these generally increase with age and physique, reaching a peak at the age of seventeen for males and fifteen for females, with little development thereafter.

Table 38. Increase in Physical Strength and Athletic Abilities

		1968	1964	Rate of increase
Athletic abilities:				
50 meter run	10 year old boys	9.0 sec.	9.3 sec.	103.3%
	10 year old girls	9.4	9.6	103.2
	14 year old boys	7.7	7.9	102.6
	14 year old girls	8.7	9.1	104.6
Soft ball throw	10 year old boys	30.4 m	30.4 m	100.0
	10 year old girls	17.0	15.1	113.3
Handball throw	14 year old boys	25.6	24.3	105.3
	14 year old girls	16.3	16.2	100.6
Physical strength:				
Vertical jump	10 year old boys	32.5 cm	30.6 cm	106.2
	10 year old girls	29.2	27.5	106.2
	14 year old boys	51.1	47.4	107.8
	14 year old girls	37.1	34.5	107.5
Grip	10 year old boys	17.8 kg	16.7 kg	106.6
	10 year old girls	16.3	15.0	108.7
	14 year old boys	35.4	33.3	106.3
	14 year old girls	26.2	25.3	103.6
Repeated horizontal jump	10 year old boys	37.6 times	33.6 times	111.9
	10 year old girls	36.8	33.5	109.9
	14 year old boys	40.2	36.9	108.9
	14 year old girls	36.8	33.9	108.6
Forward bend	10 year old boys	9.6 cm	8.6 cm	111.6
	10 year old girls	11.8	11.2	105.4
	14 year old boys	12.7	12.9	98.4
	14 year old girls	15.2	15.1	100.7

Improvements in physical strength and athletic abilities can be shown by comparing those of 10 and 14 year olds in 1964 with those in 1968. With the exception of the ability of 10 years old boys to throw a softball and of 14 years old boys to bend forward (flexibility of body), the physical strength and athletic abilities of children in these two age groups have increased. This can be attributed to the physical improvements shown above. Although it is often said that children's physical strength has been generally decreasing, this may merely imply that the increase in physical strength has not been as large as the increase in physical features.

(2) School Health and School Safety

a. Health and Safety Services

Health and safety services which are generally provided by each school both to promote pupils' health and guarantee their safety, and to allow school education to be conducted smoothly, include such programs as medical examinations, health consultations, measures to prevent sickness and a safety examination of school facilities. The health services are mainly provided by health supervisers and school nurses. Supervision and guidance regarding technical and professional matters is provided by school doctors, school dentists and school pharmacists. In order to make health services more effective in the future, it is necessary to provide all schools with the personnel mentioned above and to upgrade their quality. In addition however measures must be taken to insure that pupils can cope with evils such as environmental destruction and the excessive concentrations of population in urban areas which are accompanying our high economic growth and to insure the development of pupils able to cultivate strong minds and bodies by themselves.

Table 39. Percent of Elementary and Lower Secondary Schools Furnished with School Doctors, Dentists, Pharmacists and School Nurses

	Elementary schools			Lower secondary schools		
	1959	1964	1969	1959	1964	1969
	%	%	%	%	%	%
School doctors	95.9	98.0	98.9	97.3	99.0	98.8
School dentists	88.8	94.8	96.6	89.6	95.6	96.2
School pharmacists	14.1	77.5	83.3	13.3	78.0	82.7
School nurses	25.0	28.6	40.0	13.0	25.2	38.8

Note: Actual numbers are given in Basic Table 37.

Safety examinations of school facilities should be further strengthened in light of recent increases in school accidents. For traffic safety, certain streets are designated 'school attendance routes', and traffic is restricted. Recently the rapid worsening of traffic conditions, however, has made it necessary to further strengthen these measures.

b. Diseases and Other Abnormalities of Pupils

Among the major diseases of pupils, lice, trachoma, tonsillitis, and infectious skin disease have all been reduced in recent years, but dental cavities and near-sightedness are on the increase.

Table 40. Percent of Pupils Suffering Various Diseases and Abnormalities

Year	Dental cavities	Lice	Near sightedness	Conjunc-tivitis	Trachoma	Tonsil-litis	Empyema	Infectious skin disease
Elementary schools:	%	%	%	%	%	%	%	%
1959	76.6	21.8	9.1	3.9	3.5	10.3	1.2	3.0
1964	87.9	13.5	12.0	4.4	2.2	9.5	1.4	1.8
1968	91.5	8.9	11.7	3.9	1.2	9.9	1.4	1.4
Lower secondary schools:								
1959	59.3	20.3	16.8	3.5	3.9	8.4	2.0	2.1
1964	84.2	10.4	22.2	3.8	2.0	6.3	2.0	1.6
1968	88.5	5.6	23.3	3.8	1.3	5.8	1.9	1.1
Upper secondary schools:								
1959	51.6	14.3	29.2	2.9	2.0	4.8	1.9	0.3
1964	85.2	6.6	35.8	3.1	1.1	3.9	1.5	0.2
1968	90.4	3.1	39.4	2.7	0.7	3.1	1.6	0.2

Related to the recent rapid changes in living conditions, mental abnormalities such as autism are also becoming rather prevalent among pupils. The survey conducted in 1968 by the Ministry of Education also reveals that 2.1% of third grade elementary school pupils, 3.5% of six graders, 2.6% of first grade lower secondary school pupils and 2.8% of third grade lower secondary school pupils are estimated to be overweight. The incidence of corpulence is higher for lower secondary school pupils than for elementary school pupils, and does not differ according to age for boys. For girls, however, incidence tends to be higher for older pupils, and, in general, is higher than for boys at all ages. In the light of the high incidence of diseases and corpulence among elementary and lower secondary school pupils, it is necessary to re-examine the items to be checked in the school medical examinations.

c. Health Administration in Various Major Countries

In all the countries considered, medical examinations are regularly provided but the provision of school doctors and school nurses varies from country to country. In the United States the administrative procedures for school health examinations differ from one state to another. In some states an annual medical examination of pupils is required by law, while in others pupils are given close medical examinations upon entrance to school, in the fourth grade and in the final grade of junior high schools. In general, elementary and secondary schools have school nurses who provide daily health services for pupils.

In England and Wales the Education Act of 1944 provides that local education authorities must conduct medical examinations. There are two kinds of health examination, a regular health examination and a special medical examination for specific diseases. Parents are encouraged to attend the health examinations of pupils.

In France public school health centers are set up in each school district, whose objective is to insure that each pupil is given a medical examination upon entrance to school, once a year thereafter during his elementary school career, and twice during his secondary school career. In addition, a close medical examination is given as a basis for vocational guidance in the final grade of compulsory education.

In the Federal Republic of Germany, a school doctor is found in each school. Pupils are given medical examinations at the time of enrollment and graduation, and once every year in between.

(3) School Lunch Programs

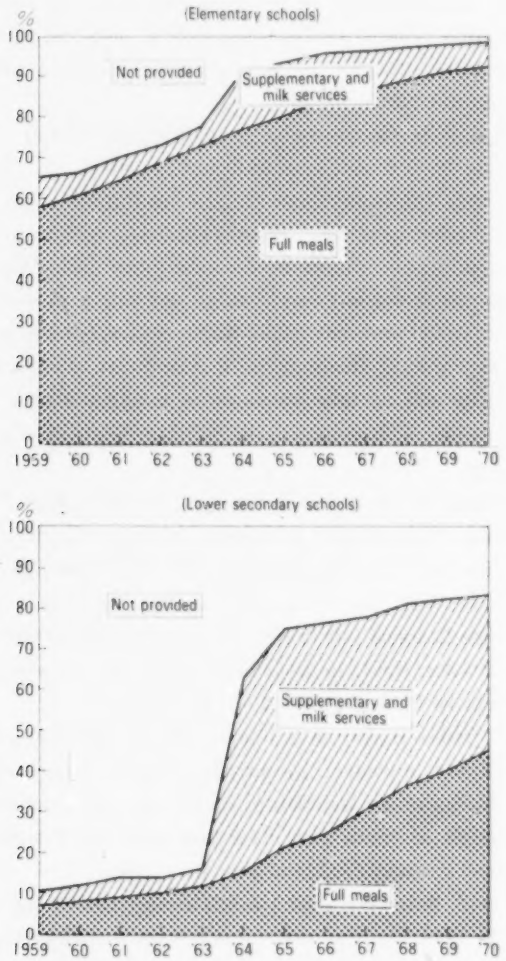
a. Present Status of School Lunch Programs in Japan

Table 41. Percent of Schools and Children Benefiting from School Lunch Programs by Type of Services, 1970

	Full meals	Supplementary meals	Milk	Total
Elementary schools:	%	%	%	%
Percent of schools	82.5	3.1	10.8	96.4
Percent of pupils	92.0	0.8	5.3	98.1
Lower secondary schools:				
Percent of schools	50.2	3.0	31.6	84.8
Percent of pupils	44.6	1.0	37.4	83.9

Note: Actual numbers are given in Basic Table 38.

Figure 29. Percent of Pupils Benefiting from Full Meals, Supplementary Meals and Milk Services, 1959–1970



Note: Actual numbers are given in Basic Table 39.

School lunch services aim at contributing to the sound development of the minds and bodies of school children as well as to the improvement of the diet of the Japanese people. In order to attain this aim, school lunches provide such nutrition as may be lacking in homes, based on standards prescribed by the Ministry of Education. School lunch services have actually contributed greatly to providing nutritionally balanced lunches to school children and thereby to improving their physical measurements.

School lunch services also contribute to cultivating sociability among pupils as well as to developing desirable eating habits in so far as efforts are made for teachers to have lunch together with pupils and to create a comfortable atmosphere.

School lunch services have been improved every year both in terms of quantity and quality, but there are many problems yet to be solved. Quantitatively, measures should be taken in the future to extend services not only to elementary and lower secondary schools not yet providing school lunch services, but also to kindergartens and upper secondary schools. Qualitatively, it is necessary to improve physical and personnel conditions and to take measures to establish a rational system for purchasing food, thereby contributing to the overall expansion and improvement of school lunch services.

b. Present Status of School Lunch Programs in Various Major Countries

In all the countries considered, a majority of schools at the elementary and secondary education levels provide some type of lunch services. Many schools are furnished with school cafeteria or lunchrooms, and often the central and local governments provide financial support for the school services so that pupils may be served low cost lunches. Low-income families especially are given direct financial support according to their level of income.

In the United States, under the National School Lunch Law enacted in 1946, the Federal Government provides a considerable amount of assistance in the form of subsidies and the supply of materials to enable each school to serve food at low cost. Usually, schools in urban areas have their own cafeteria or lunchroom in which students select prepared foods and serve themselves.

In England and Wales the school lunch service has a long tradition. The Education Act of 1944 provides that local education authorities shall provide school lunch services for desirous primary and secondary school pupils. Accordingly, school lunch services are provided in most schools.

School lunch services are also provided in France. It is to be noted that in France there is a 'semi-dormitory system' which provides both lunch and dinner for

those primary and secondary school children whose homes are distant from school or whose mothers are employed outside the home.

In the Federal Republic of Germany, school lunch programs were started as an emergency measure to meet the serious lack of food immediately after World War II. Today, however, the school lunch service is continued unrelated to its original purpose.

In the U.S.S.R., there are 'all day schools' and 'dormitory schools' which provide not only lunch but also refreshment and supper for those school children whose homes are distant from school or whose parents both work outside the home.

5. Admission Procedures

(1) Access to Institutions of Secondary Education

As already mentioned in Chapter I, the proportion of lower secondary school graduates going on to upper secondary schools exceeds 80% in Japan, and 98% of the lower secondary school pupils who want to go on to upper secondary school are admitted. There are still however, many problems to be solved in admission procedures.

Admission procedures are decided by each prefectural board of education in light of the actual conditions of the community and school. This provision, however, has resulted in wide differences in admission procedures among prefectures. The number of subjects covered in the scholastic achievement tests ranges from a high of nine (three prefectures) to a low of three (four prefectures). Between these two extremes, one prefecture gives examinations in six subjects, 35 prefectures in five subjects and two in four subjects. There is also a prefecture which does not conduct scholastic achievement tests in any subjects.

As mentioned above, the selection of entrants into upper secondary schools is made by each prefecture. The great impact that entrance examinations for upper secondary schools may have upon the lower secondary school education, however, makes it necessary to appraise the appropriateness of conducting examinations, the extent to which credentials submitted to upper secondary schools from lower secondary schools should be evaluated, the number and kinds of subjects to be covered in examinations, the content of questions, and the method of presenting them.

In addition, there is an institutional problem in the tendency of students to concentrate in particularly prestigious schools. To solve this problem, some new attempts are being employed such as the system of automatically allocating lower secondary school graduates who have passed examinations to one of a group of several upper secondary schools. The problems, however, have not yet been solved.

Other major countries can be divided into three groups in terms of their admission procedures. The first group includes the United States in which there is no selective examination for transition from junior to senior high schools. The second group includes European countries where some form of selection between elementary education and lower stage of secondary education exists. The third group includes the U.S.S.R. in which selective examinations are conducted only for upper secondary education level vocational schools corresponding to the technical college in Japan.

As mentioned above, in the European countries, selective examinations between elementary and secondary schools such as the eleven-plus examinations in the United Kingdom, have traditionally been conducted, thereby dividing pupils into different types of schools at an early stage (11 years old in France and ten in the Federal Republic of Germany). In recent years, however, the appropriateness of dividing children by a single examination has come to be doubted.

In England and Wales, the eleven-plus examinations are being abolished in those areas where comprehensive secondary schools have been established.

In France pupils are put into the secondary education courses most suited to their abilities and aptitudes by orientation guidance committees, taking into consideration the opinions of the school and of parents. Pupils thus selected, however, may transfer to another type of school during their secondary education period. In the Federal Republic of Germany elementary and secondary school teachers cooperatively conduct 'examination classes' lasting one to two weeks, in an attempt to make an appropriate selection of pupils.

As described above, in most major countries, selective examinations for the upper stage of secondary education are being abolished or improved.

(2) Access to Higher Education

As regards the selection of entrants into universities, the problems are more difficult than is the case with upper secondary schools. The total capacity of institutions of higher education is enough to accommodate 70 to 80% of the upper secondary school graduates who want to go on to higher education. However,

differences in social evaluations for each university are widening along with the increase in the number of universities, and the traditional tendency in Japan is to place too much emphasis on educational attainments leading students to become concentrated in the so-called prestige universities. This trend is making university admissions more and more competitive, and thus having a serious impact upon the educational activities of upper secondary schools.

Various measures have thus far been taken to improve this situation. After World War II, selection based on comprehensive evaluations including aptitude tests were made from 1947 to 1954. A comprehensive evaluation method utilizing credentials from upper secondary schools was adopted in 1966. A system of admitting a certain number of students based on recommendations from upper secondary schools was introduced in 1967. According to the 1963 recommendation of the Central Council for Education regarding the improvement of university admission procedures, the necessity of establishing an insitute specializing in the study and development of scholastic aptitude tests and scholastic achievement tests and in their administration was pointed out and the Educational Test Research Institute was established to conduct such tests nation-wide as a basis for selecting university entrants. This institute, however, had to be abolished after several years, due mainly to the noncooperative attitude of the universities.

In spite of these measures, students are still admitted to universities exclusively on the basis of one time scholastic examinations. The objective of selecting those whose abilities and aptitudes are most suited to university education has not yet been achieved. Research made by the Educational Test Research Institute, the National Institute for Educational Research and other research institutes have reached the following conclusions as to the information to be used for the selection of university entrants:

(1) Selection made only on the basis of the results of scholastic examinations conducted by individual universities can not provide highly valid results.

(2) The comprehensive use of scholastic examinations conducted by individual universities, tests administered by the Educational Test Research Institute and reports from upper secondary schools can select students whose scholastic attainment during their university career is much better than any of these individually.

(3) Scholastic achievements during the upper secondary school period as reported by these schools had a higher validity than the scholastic entrance examinations conducted by each university.

University entrance procedures in various major countries can also be categorized into three patterns, the American, European and the Soviet.

Admission procedures practiced in the United States can be further sub-divided into three categories: (1) Selection based on scores of tests administered by the College Entrance Examination Board, an independent examining agency, plus the student's academic records during his secondary school years; (2) Selection based on entrance examinations administered by each college or university, supplemented by the results of the College Board tests; (3) Selection based on the number of credits acquired in secondary schools and/or the record of grades earned. The first category is practiced in approximately one half of all universities and colleges in the United States. The tests administered by the College Board include the Scholastic Aptitude Tests and the Scholastic Achievement Tests. Some universities require that both of these tests be taken, while in others only one of the two is required.

On the other hand, in the European countries, selection of university entrants is based on certifying examinations administered sometime during secondary school.

In England and Wales admission to the universities is based on successfully passing the examination for the General Certificate of Education which is a matriculation examination for university entrance. Candidates are examined at ordinary and advanced levels. The ordinary level is customarily taken at the end of the fifth year of secondary education (at the age of 16), and the advanced level is taken one to two years after this. Candidates decide the number and level or subjects to take in light of the requirements set by the university to which they apply.

In France admission to the universities is based on successfully passing a comprehensive examination called *baccalauréat* held by the central government at the end of the *lycée*. In principle a successful candidate can enter any university he wants, however, with the recent increase in the number of candidates, there is a plan to limit successful candidates to universities in the area in which they live.

In the Federal Republic of Germany admission to the universities is determined by successfully passing the *'Abitur'* examination given at the end of the *Gymnasium* by the *Gymnasium* approved by each state. This examination functions as a graduation examination as well as a certificate for admission to a university.

In the U.S.S.R. each university selects its entrants based on entrance examinations in accordance with nationally prescribed standards for examination procedures, subjects to be examined and content to be covered. Admission

procedures in the U.S.S.R. are different from those in Japan, the U.S.A. and European countries in giving favorable treatment to those with military service, those recommended by employers and those having labor experience.

The general picture of university admission procedures outlined in the preceding paragraphs shows a new tendency toward attempting to select appropriately and accurately from among a wide base those who have abilities and aptitude.

In the United States a special officer usually called an 'admissions officer' is appointed in each university for the purpose of making appropriate admission proceedures. He must know educational content and the level of high schools. Orientation aimed at giving appropriate advice to incoming students during the period of transition from secondary school to college is also widely practiced.

In France the opportunity for higher education has been widened to include those students who have finished technical secondary schools by the creation of a *baccalauréat technique*. The opportunities to pass the examination have also been widened by increasing the number of examinations from one to two times a year. In the Federal Republic of Germany there is a so-called Second Way providing an opportunity for those who went on to vocational schools after leaving *Volksschule* or *Realschule* to apply for entry to a university with the approval of the state Ministry of Education.

6. Diversification and Upgrading of the Content and Method of Social Education

Social education provides a wide range of programs to meet a variety of social needs. They can be categorized into several areas such as those related to general culture and hobbies, sports and recreation, family living (including family education), occupations and citizenship.

Recent social changes such as industrialization, demographic concentration in urban areas, extension of the average span of human life, and changes in family life necessitate provision of the following types of education at each stage of human development.

(1) For infancy and early childhood, parents should be encouraged to learn various things and children should be encouraged to play in groups.

(2) For middle childhood, parents should deepen their understanding of the aims of middle childhood education and children at this stage should be given opportunities to explore nature, to play, and to participate in group life. Bad

magazines and movies should be prohibited and children should be trained to be selective regarding mass media.

(3) For adolescence, youths, especially those moving to urban areas, should be given assistance in becoming independent adults in mind and body. Youths should in general be encouraged to reflect on their own way of life, and widen their thoughts and views. They also should be encouraged to utilize their leisure time in a planned way. Training for social solidarity is also an important task at this stage of development.

(4) For adulthood, measures should be taken to meet technological innovations and the rapid increase in information, consideration being given to the recovery of initiative as human beings. Interest in family education should be aroused. For women especially, the understanding on family life should be enriched, volunteer activities should be promoted, and thus their abilities should be fully developed.

(5) For later maturity, activities to improve life for older men should be developed, vocational training should be provided, and other measures for enriching their lives should be taken.

Social education activities can be categorized into three patterns. The first is individual learning utilizing correspondence courses, educational broadcasting and libraries. The second involves attendance at public lectures, concerts, or athletic meets in which people can participate freely depending upon the theme or kind of activity. Third is group learning in which particular members participate and which create a collective identity among its members, such as young men's associations, women's associations, youth classes, and classes for women.

Diversification of learning content and demands for the development of individuality are increasing the necessity for individual learning. But to meet the tendency toward professionalization and the upgrading of learning content, the public activities of the second type are also necessary, and in light of the fact that community consciousness is becoming weaker and the sense of solidarity is being lost along with urbanization, group learning activities should also be strengthened.

CHAPTER III. SUFFICIENCY OF TEACHING STAFF AND PROVISION OF SCHOOL FACILITIES

1. Supply of Teaching Staff and Working Condition of Teachers

(1) Class Size and Quota of Teachers

a. Standards for Class Size

The standard number of children in one class at both elementary and lower secondary schools was established at 50 by the 1958 Law Concerning Class-size and the Standard of Fixed Number of Educational Personnel in Public Compulsory Education Schools (hereinafter called the Standard Law), for the purpose of optimizing class size and teacher allocation.

In 1963 by partial amendment to the Standard Law, the standard class size was lowered from 50 to 45 to make educational activities more effective.

The Standard Law was again amended in 1969. With this revision, the standards for class size and for the quota of teachers were further improved. The new amendments provide that one-teacher schools in elementary and lower secondary schools and multigrade-classes consisting of pupils of four or five different classes in elementary schools be abolished. Moreover, a diminution of class size is to be made for multigrade-classes consisting of pupils of two or three different classes in elementary schools and those consisting of pupils of two different classes in lower secondary schools. In addition, class size in special classes for slow learners in both schools will be reduced.

In 1969, the average number of pupils in public elementary and lower secondary schools per class was 33 and 37, respectively.

It is hard to compare absolutely the standards of class size among other major countries because of the differences in the character of each country's standards. Taking these differences into proper consideration however, the standards of class size in various major countries are shown in Table 42-3.

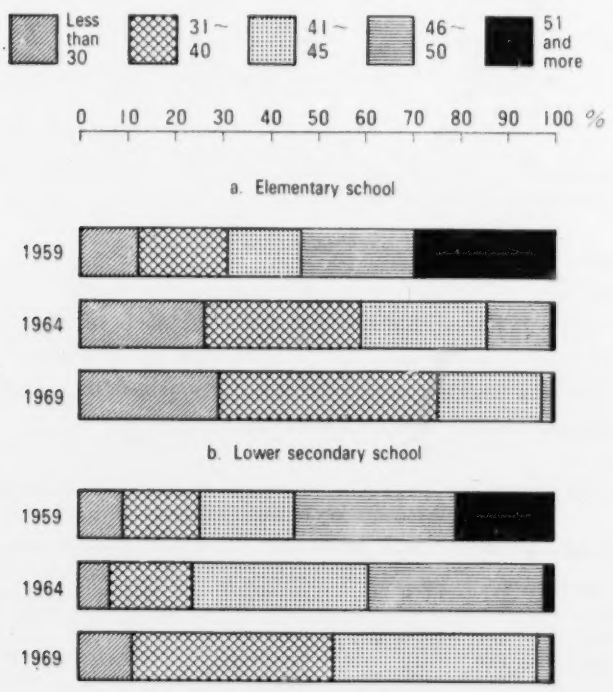
The average number of pupils per class in public elementary schools in the England and Wales, France and the Federal Republic of Germany is 33, 26 and 35 respectively. For public secondary schools the number is 28, 28 and 30

Table 42. Standard Class-Size in Various Major Countries

Country	School level	Number of pupils per class	Note
Japan	Elementary schools	45	The standard class size is not the average class size, but the maximum number of pupils per class.
	Lower secondary schools	45	
U.S.A.	Elementary schools	20~30	There is no single standard class size effective in all the states. The standards differ somewhat among states and school districts. For secondary schools, moreover, the standards are slightly different according to subject matter. Here the average maximum and minimum numbers of pupils per class are shown.
	Secondary schools	21~33	
England & Wales	Elementary schools	40	The Ministry fixes the standard class size. There are indications that the standard for elementary schools will be lowered to that of secondary schools.
	Secondary schools	30	
France	Elementary schools	40	The Ministry fixes the standard class size. The law requires that the number of pupils per class for such subjects as French, mathematics and foreign languages in lower secondary courses should be lower than 24 at least one or two instruction hours per week.
	Secondary schools	35	
Germany (F.R.)	Elementary schools	33	The standard class size differs slightly among the states.
	Secondary schools		
	Realschulen	30	
	Gymnasien	24	
U.S.S.R.	Elementary schools	40	The Federal Ministry fixes the standard class size which are effective in all the states. Foreign language instruction classes containing more than 25 pupils are divided into two sections.
	Secondary schools	35	

respectively. Compared with their Japanese counterparts, no significant differences can be found. However, the percentage of big classes (those with more than 41 pupils) is higher in Japan than in England and Wales and the Federal Republic of Germany.

Figure 30. Percent Distribution of Number of Classes by Size, 1959–1969



Note: Actual numbers are given in Basic Table 40.

Table 43. Percent Distribution of Classes by Size in Public Elementary and Secondary Schools in Japan, England & Wales and Germany (F.R.)

Country	School level	Year	Class size				
			Total	30 or less	31~40	41~50	51 and over
			%	%	%	%	%
Japan	Elementary	1969	100.0	29.4	46.4	24.1	0.1
	Secondary		100.0	12.1	43.0	44.9	0.0
England & Wales	Elementary	1967	100.0	31.9	57.3	10.7	0.1
	Secondary		100.0	63.6	35.5	0.8	0.1
Germany (F.R.)	Elementary	1966	100.0	31.0	48.1	18.8	2.1
	Secondary						
	Realschulen		100.0	35.4	54.0	10.4	0.2
	Gymnasien		100.0	57.8	34.9	7.3	0.0

Note: Actual numbers are given in Basic Table 41.

b. Quota of Teachers

On the basis of school size as determined by the number of classes, the Standard Law sets the standards for calculating the quota of teachers in public elementary and lower secondary schools. The standards regarding the quota of teachers have been improved in accordance with revisions in the standards of class size, the quota of teachers being constantly increased.

Table 44. Number of Full-Time Teachers per Class in Public Elementary and Secondary Schools in Various Major Countries

Country	Elementary schools		Secondary schools	
	1964	Latest year	1964	Latest year
Japan	1.23	1.27 (1969)	1.58	1.75 (1969)
England & Wales	1.10	1.10 (1967)	1.41	1.41 (1967)
France	1.09	1.08 (1967)	1.50	1.53 (1967)
Germany (F.R.)	0.92	1.00 (1966)	1.51	1.43 (1966)

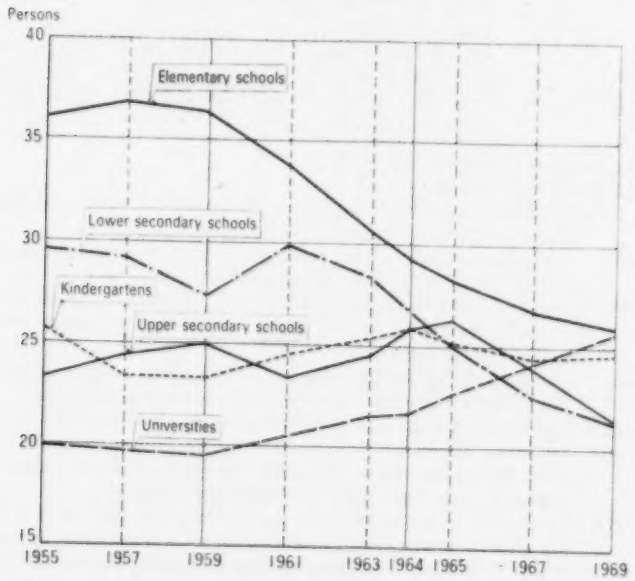
Note: Actual numbers are given in Basic Table 42.

As is shown in Table 44, the number of full-time teachers per class in public elementary and secondary schools is greater in Japan than in, England and Wales, France and the Federal Republic of Germany.

c. **Number of Pupils per Teacher**

The average number of pupils per full-time teacher, which is the total enrollment divided by the total number of full-time teachers at each school level, has decreased year by year in the elementary schools, reaching a level of 26 in 1969. In the lower secondary schools, likewise, the number has decreased after reaching a peak of 30 in 1961, so that in 1969 it was down to 21. In upper secondary schools, including part-time courses, the number of pupils per teacher has also decreased annually since reaching a peak of 26 in 1965. In 1969 it was down to 22 pupils per teacher. This is due to the decrease in the population of the age group and to the increase in the number of teachers, and occured despite the fact that the percent of lower school graduates entering upper secondary schools increased. Conversely, the number of students per teacher (excluding assistants) in 4 year universities has been increasing every year since 1961, reaching 26 in 1969, as a result of the rapid increase in the number of students accompanied by the increase in the percentage of the age group entering universities.

Figure 31. Student-Teacher Ratios



Note: Actual numbers are given in Basic Table 43.

Table 45. Number of Pupils and Students per Teacher in Kindergartens, Upper Secondary Schools and Universities by Establishing Body

Establishing body	Kindergartens		Upper secondary schools		Universities	
	1964	1969	1964	1969	1964	1969
Total	25.9	24.8	25.9	21.6	21.8	25.6
Public	30.0	27.7	23.1	19.8	11.0	12.2
Private	24.6	24.0	34.6	27.2	36.5	39.5

Note: Actual numbers are given in Basic Table 44.

There are wide differences found in the student-teacher ratios by establishing bodies; in upper secondary schools and universities big differences are found between public and private institutions. In addition, the percent of students belonging to humanities and social science faculties is higher in private universities

Table 46. Number of Pupils and Students per Teacher in Various Major Countries

Country	Elementary school		Secondary school		University	
	1964	Latest year	1964	Latest year	1964	Latest year
Japan	29.2	26.0 (1969)	26.4	21.5 (1969)	21.8	25.0 (1969)
U.S.A.	25 9	23.2 (1968)	–	–	15.0	15.4 (1968)
Britain	29.7	29.9 (1967)(1)	19.9	19.6 (1967)(1)	8.1	7.9 (1967)
France	25.1	23.5 (1967)	16.9	16.6 (1967)	21.8	22.6 (1967)
Germany (F.R.)	35.6	34.7 (1966)	20.2	21.7 (1966)	27.5	28.3 (1966)
U.S.S.R.	26.2	26.9 (1968)	15.2	15.1 (1968)	17.5	17.4 (1965)

Note: Actual numbers are given in Basic Table 45.
(1) England & Wales only.
Japan; Elementary School means elementary schools (Shogakko). Secondary School comprises lower and upper secondary schools.
U.S.A.; The number for secondary schools is totalled in with that for elementary schools. University teachers comprise lecturers and above.
Britain; Elementary and secondary schools are only those schools publicly-maintained. University figures include the number of teachers (including assistants) and students in universities only.
France; University figures include only the number of teachers (including assistants) and students (excluding foreign students) in national universities.
Germany (F.R.); Elementary School means Volksshulen (Grundschulen and Hauptschulen). Secondary School comprises Realschulen and Gymnasien. For University the 1964 figures are those for 1960. University teachers include academic assistants (excluding ordinary assistants) and above.
U.S.S.R.; Elementary School includes the number of pupils and teachers from 1st to 4th grade; Secondary School includes the number of pupils and teachers from 5th to 10th grade. For University the numbers of teachers and students are the total numbers (including those in evening and correspondence courses) in all higher education institutions.

than in national and local public universities. In 1969, the number of students per teacher both by faculties and by establishing bodies in humanities and social science was 15 in national and local public universities and 45 in private universities, while for natural science it was 12 in public universities and 31 in private universities.

(2) Composition of Teaching Staff

a. Classification of Teachers and Their Duties

The composition and respective duties of the staff in elementary, lower and upper secondary schools are prescribed by the School Education Law and other regulations. According to the law, each school shall have a principal, teachers, a nurse teacher and business personnel. Each school may in addition have assistant teachers and other necessary personnel. By the Enforcement Regulations of this law each school shall have a vice-principal, a vocational guidance teacher and a school health guidance teacher, and, by the School Library Law, a school librarian is required.

The duties of the vocational guidance teacher, the school health guidance teacher and the school librarian are performed by ordinary teachers. In large schools a chief of teachers for each grade and a certain number of chiefs of subject teachers are alloted. Their duties are also performed by ordinary teachers.

Recently the number of pupil guidance teachers in lower and upper secondary schools has been steadily increasing; the percent of these teachers in the total number of full-time teachers increased from 3% in 1964 to 4% (8,700 teachers) in 1969 in lower secondary schools, while, in upper secondary schools, the percentage was 2% (4,000 teachers) in 1969.

The number of school health guidance teachers and school librarians as a percent of the total number of full-time teachers (excluding principals, assistant teachers and lecturers) are respectively 5.4% (17,156 teachers) and 0.1% (265) in elementary schools, 3.9% (8,144) and 0.1% (270) in lower secondary schools, and 1.5% (2,844) and 0.4% (659) in upper secondary schools.

The services of school business personnel are important aids to teachers' activities. In 1969 the average ratio of business personnel to teachers in public elementary, lower and upper secondary schools was 23 business personnel per 100 teachers. The business personnel-teacher ratios in other countries were 41 (U.S.A., 1967) and 36 (France, 1967), per 100 teachers, respectively, though a direct comparison with raw statistics would not be adequate because of differences in the definition of business personnel in each country.

b. Composition of Teachers by Qualification, Academic Background and Age

Looking at the composition of teachers by qualification and academic background, one notes that in prewar days and just after the war there were a number of teachers such as substitute teachers and assistant teachers having no regular qualifications. The percent of these teachers in the total, however, has decreased rapidly year by year with the improvement and perfecting of the teacher training system and with the expansion of teacher training universities. As of 1969, teachers without regular qualifications accounted for only 1.7% of the total in elementary schools, 0.4% in lower secondary schools and 1.8% in upper secondary schools.

As for the composition of teachers by academic background, the distribution of teachers who have completed four-year university courses or more is considerably unbalanced according to locality or school level. In prefectures with big cities, for example, teachers with four-years of university education or more accounted for around 40% of all the teachers in local public elementary schools, while, in primarily rural prefectures, the percentages ranged from 9 to 15%. Therefore large differences in the composition of teachers by academic background exist from area to area.

Table 47. Percent Distribution of Local Public School Teachers by Academic Background

(1968)

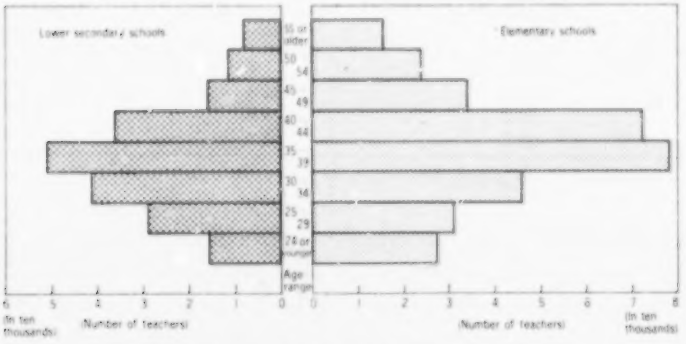
School level	Total	University graduates	Junior college graduates	Upper secondary school graduates
	%	%	%	%
Elementary	100.0	24.1	59.8	16.1
Lower secondary	100.0	52.9	43.4	3.7
Upper secondary	100.0	91.2	7.3	1.5

Note: Actual numbers are given in Basic Table 46.

As for the composition of teachers in local public elementary and lower secondary schools by age, the percent of teachers aged 35 to 44 ranged from 42 to 46%, and the proportion of younger teachers below 29 years of age was around 20% of the total. Thus there exists some distortion in the composition of teachers by age.

The cause for the distortion derives from the employment of large numbers of new teachers after the end of World War II, when the new system of education was inaugurated, and there seems to be the possibility of great periodic changes in the demand and supply relationship of teachers in the future. This distortion was

Figure 32. Composition of Local Public Elementary and Lower Secondary School Teachers by Age (1968)



Note: Actual numbers are given in Basic Table 47.

especially conspicuous among local public elementary school teachers. The percent of elementary school teachers below 29 years of age serving in schools in the rapidly growing industrial areas ranges from 29 to 37%, while, in the areas where population is decreasing, it is less than 10%.

As for the composition of teachers by academic background in other major countries, 67% of all the teachers in public elementary and secondary schools in the U.S.A. in 1967 had bachelor's degrees and 28% had master's or higher than master's degrees. Recently, in some states, master's degrees have been required of prospective teachers for elementary and secondary schools, and a tendency to raise teaching qualifications is in evidence. In England and Wales, in 1967, 98% of all the teachers in public elementary and secondary schools were qualified teachers who were graduates from colleges of education or other higher education institutions. In the U.S.S.R., in 1968, 20% of the elementary school teachers were university graduates and 72% came from secondary professional schools (equivalent to Technical Colleges in Japan) and 89% of all the secondary school teachers were university graduates.

c. Composition of Teachers by Sex

As for the structure of the teaching staff by sex, the percent of women teachers both in elementary and lower secondary schools have been increasing in recent years, especially in elementary schools where women teachers account for half of the total. In upper secondary schools, in contrast to both school levels mentioned, the percent of women teachers is declining.

Table 48. Percent of Women Teachers in Japan

School year	Elementary school	Lower secondary school	Upper secondary school
	%	%	%
1959	44.9	21.4	17.3
1964	48.0	24.8	17.1
1969	50.3	26.1	16.8

Note: Actual numbers are given in Basic Table 48.

In contrast to the high per cent of women teachers in elementary schools, however, the composition of principals by sex shows that the proportion of women principals in elementary schools was very low, accounting for only 0.9% (200 principals) in 1970. Likewise, the number of women vice-principals of local public elementary schools was small (483 vice-principals in 1970), the total of women principals and vice-principals accounting for only 1.5% of all the elementary school principals and vice-principals.

Every other major country has a higher percentage of women teachers in elementary and secondary schools than Japan, especially the U.S.S.R. and the United States of America where more than 85% of the teachers in public elementary schools are women. The percent of women principals in elementary schools (four-year course) in the U.S.S.R. amounted to 78% in 1968.

Table 49. Percent of Women Teachers in Public Schools in Various Major Countries

Country	Year	Elementary school	Secondary school
		%	%
Japan	1964	48.1	24.2
	1969	50.4	25.6
U.S.A.	1963	85.3	45.7
England & Wales	1964	74.9	40.4
	1967	74.9	40.0
France	1964	64.8	51.7
	1967	65.4	51.2
Germany (F.R.)	1964	50.8	34.6
	1967	53.4	34.1(1)
U.S.S.R.	1964	85.0	60.7
	1968	86.3	62.9

Note: Actual numbers are given in Basic Table 49.
(1) Including teachers in private schools.

(3) Working Conditions of Teachers

a. Salary System of Teachers

In Japan there are 4 salary tables for the teaching staff members in national schools i.e., for teachers in universities and junior colleges; in technical colleges; in upper secondary schools; and in lower secondary and elementary schools, respectively. Grades and steps in the salary tables are determined on the basis of degrees of complexity, difficulty, and responsibility of teaching duties, as well as

Table 50. Index of Teacher's Starting Salaries and Maximum Salaries in Various Major Countries

Country	School level	Starting salaries	Maximum[1] salaries	Raise periods and necessary conditions
Japan	Elementary and lower secondary schools[2]	1.00	3.31	Once a year; moreover, there is a system of special raises in salaries on the basis of merit.
	Upper secondary schools[3]	1.00	3.93	
U.S.A.[4]	Elementary and secondary schools	1.00	2.67	Generally once a year; moreover, there are some school districts which have adopted a system of special raises.
England & Wales	Elementary and secondary schools	1.00	3.60	Once a year.
France	Elementary schools	1.00	2.17	Raises from 1 year 3 months to 4 years 6 months on the basis of merit.
	Secondary schools	1.00	3.33	
Germany (F.R.)[5]	Elementary schools	1.00	1.76	Once in 2 years.
	Secondary schools	1.00	1.98	
U.S.S.R.	Elementary and secondary schools	1.00	1.71	Raises when the teacher has completed 5, 10, 15 and 25 years of service, respectively.

Note: (1) Including principals.
(2) The index number shows the salary for the highest Step of Grade 1 divided by that of Step 4 of Grade 2 in the Salary Table for Government Officials classified as Teaching Staff.
(3) The index number shows the salary for the highest Step of Grade 1 divided by that of Step 2 of Grade 2 in the Salary Table for Government Officials classified as Teaching Staffs.
(4) Starting and maximum salaries are the average starting and average maximum salaries for teachers in all public schools in 1969.
(5) The salary index is that for the state of Niedersachsen.

the academic background, kinds of teaching certificates, and years of teaching experience of each teacher. For teachers in elementary, lower and upper secondary schools, the salary tables consist of 3 grades as standard classifications, i.e., for principals, for teachers, and for lecturers and assistant teachers. The salary system for teachers in national schools serves as the basis for salaries of teachers in local public schools as well.

As regards the kinds of salary tables for teachers in other major countries, France and the Federal Republic of Germany have three kinds of tables; i.e., for teachers in elementary schools, secondary schools and universities, respectively, while the United States of America, England and Wales and the U.S.S.R. have two tables, i.e., one for elementary and secondary school teachers and the other for university teachers. Each country applies salary tables to principals of elementary and secondary schools different from those for teachers. The starting salary is decided on the basis of the academic background, the teaching certificate and the teacher's qualifications. In the Federal Republic of Germany, the age of the teacher is also considered in the determination of salaries.

In Japan the period for salary raises for elementary and secondary school teachers is, in principle, once a year so long as the teacher concerned attends to his duties diligently and is not below the number of the prescribed days of service. Further, this normal period can be shortened on the basis of merit. This is called the System of Special Raises in Salaries. In the Federal Republic of Germany the salaries for teachers are raised every two years and in the U.S.S.R. salary raises for each teacher come only four times, when the teacher concerned has completed 5, 10, 15, and 25 years of service. In France, the span of years for salary raises for teachers ranked in low grades of the salary table ranges from 1 year 3 months to 1 year 6 months. However, in general, the higher the grade the longer span for raises becomes. On the basis of merit, the periods for raises in the salary grades are divided into three, i.e., the shortest, the ordinary and the longest, each including 30%, 50% and 20% of the teachers concerned, respectively. Compared with other countries, the increase in the salary index for teachers in elementary and secondary schools was the greatest in Japan, while the increase was the least in the U.S.S.R.

In Japan, there are also allowances such as a family allowance, an adjustment allowance, a commutation allowance, a special duties allowance, a remote duty allowance, a severe climate allowance, a managerial duty allowance, a starting salary adjustment allowance, an annual bonus, a meritorious duty allowance, a part-time

or correspondence course allowance, a vocational education allowance, etc., each of which is characterized either as a living wage, an efficiency wage or a service wage.

In other major countries there are not as many kinds of allowance as in Japan. The allowances most commonly found in other major countries are a family and children allowance (the United States of America, France, the Federal Republic of Germany), a duty place allowance (England and Wales, France, the Federal Republic of Germany, the U.S.S.R.), and a managerial duty allowance (England and Wales, France, the Federal Republic of Germany). Unique kinds of allowance include an extra-curricular activities allowance (the United States of America), a head of department allowance (England and Wales), a guidance for future career allowance (France), and a foreign language teaching allowance (the U.S.S.R.). In France and the U.S.S.R. teachers who take charge of lessons beyond the standard hours of instruction are given allowances in accordance with the services performed.

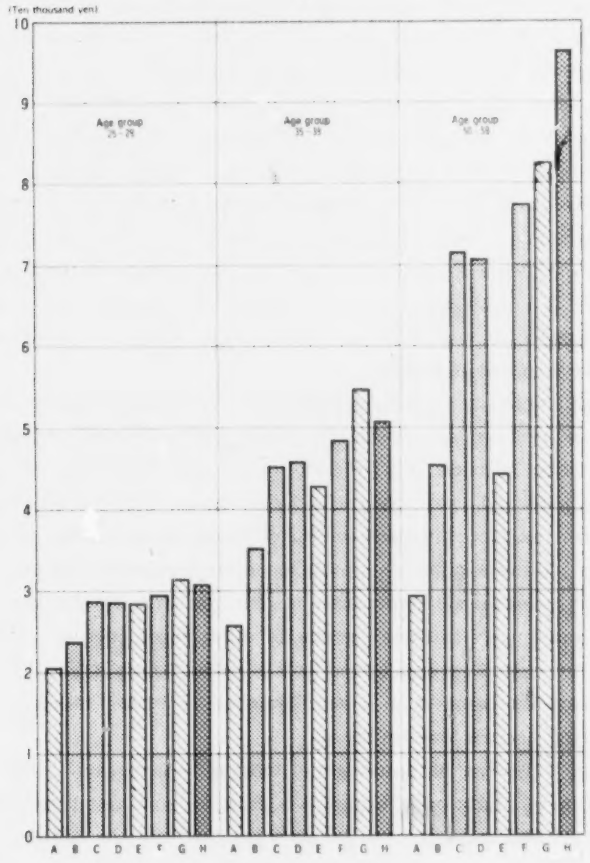
b. Salary Standard of Teachers

The actual amount of teachers' salaries for private school teachers aged 25 to 39 years of age are lower at each school level (excluding universities) than those of local public school teachers. Furthermore, in the age group from 50 to 59 the salaries for national and local public school teachers are higher at all school levels than those of private school teachers and the difference in the salaries of teachers in public schools and those in private schools becomes even greater with age. In all age groups the salaries for private kindergarten teachers are conspicuously low.

In comparison with teachers' salaries in other major countries, the average Japanese teachers' salaries at each school level in proportion to National Income per capita is almost the same as in other developed countries, though the actual amounts of salaries are far lower in Japan.

From the viewpoint of ensuring the most able personnel to perform the important duties in education in future, it is necessary to examine deliberately the whole system of teachers' salaries including starting salaries, the salary standards at each school level, etc.

Figure 33. Standard Monthly Salaries of Teachers (1965)



A: Private kindergarten teachers
B: Local public kindergarten teachers
C: Local public elementary school teachers
D: Local public lower secondary school teachers
E: Private upper secondary school teachers
F: Local public upper secondary school teachers
G: Private university teachers
H: National university teachers

Note: Actual numbers are given in Basic Table 50.
Monthly salaries here are the average monetary amounts paid.

Table 51. International Comparison of Average Teachers' Salaries and National Income per Capita

Country	Year	Average amount of teachers' salaries: Elementary and secondary schools (1) (in yen)	Index(teachers' salaries divided by national income per capita)	Universities and colleges (2) (in yen)	Index(teachers' salaries divided by national income per capita)	National income per capita (in yen)
Japan	1964	702,757	293	1,097,003	457	240,191
	1968	1,047,517	252	1,392,921	335	415,845
U.S.A.	1964	2,230,200	229	2,238,680(3)	320	974,520
	1968	2,846,880	221	3,684,600(4)	310	1,285,920
Britain	1964	1,373,904	279	3,226,608	655	492,912
	1967	1,709,568	289	2,592,576	439	590,688
Germany (F.R.)	1964	1,682,010	344	2,928,650	531	488,880
	1966	2,045,340	372	–	–	550,440

Note: (1) Full-time teachers in public schools only. For Japan, the figures are the average amounts of salaries for teachers in elementary, lower secondary and upper secondary schools. For Britain, the figures are those of England & Wales only.

(2) Japan; Full-time teachers in national universities only.
U.S.A.; Lecturers and above in public and private universities (excluding junior colleges).
Britain; University teachers in universities.
Germany (F.R.); University teachers and other staff in national universities.

(3) 1963

(4) 1967

c. Welfare Services for Teachers

In Japan a Local Public School Mutual Aid Association has been established with all local public school teachers as members, providing such long-term allowances as retirement pensions, disability pensions and survivers' pensions, as well as short-term allowances for the sick and injured, suspension of service and those suffering from natural disasters. For private school teachers there is a similar union called the Private School Personnel Mutual Aid Association, providing the same kinds of allowances as those of the public school teachers with the same benefits. There is also a National Public Service Mutual Aid Association for teachers in the national schools who are government officials, providing the same benefits as those of the public school teachers.

In other major countries, too, there are retirement annuity systems for public officials and pension systems which include teachers in their membership. Disability

pension system, and survivers' pension systems are also common in other major countries.

In all the states of the United States of America there is a retirement pension system for public officials, including teachers. In England and Wales there is a retirement pension system for primary and secondary school teachers throughout the country, and the teachers in the Federal Republic of Germany, France and the U.S.S.R. benefit from national public service pension systems. Allowances for the sick and injured and for the unemployed are provided under different systems in each country. In France and the Federal Republic of Germany such allowances are paid as a kind of compensation for public officials, while in the United States, the England and Wales and the U.S.S.R., they are provided as part of the social security system for the general public.

Table 52. Retirement Pensions in Major Countries

Country	Minimum years of service	Mandatory age of retirement	Percent of maximum pension on retirement after 30 years of service	Installment as a percent of basic salary
Japan	20 years and more	55	55% total amount of salary	4.5% total amount of salary
U.S.A.	5~30	60~65	45~60	2~7
England & Wales	30	60	38	6
France	30	60	60	6
Germany (F.R.)	10	65	70	none
U.S.S.R.	25	male 60 female 55	50	none

(4) Teaching Loads

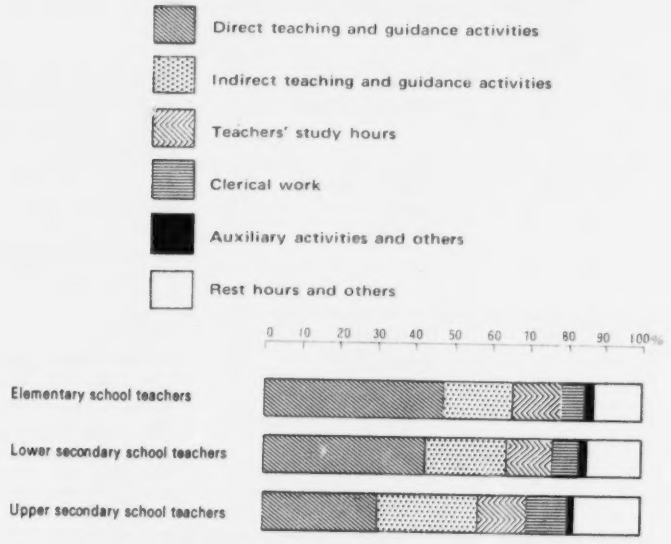
a. Service Situations of Teachers

Normal service hours of teachers per week in local public elementary, lower secondary and upper secondary schools are provided by prefectural ordinances. They are generally 44 hours per week, though with slight differences in the number of hours by prefecture.

With regard to the composition of average teaching loads in a week, the survey on teaching loads in local public schools conducted in 1966 shows that the hours that teachers paid to "direct teaching and guidance activities" such as class-room instruction, supplementary lessons and extra-curricular activities including guidance

and coaching for various club activities account for 47% of their total work hours in elementary schools, 43% in lower secondary schools, and 32% in upper secondary schools, respectively, and that "indirect teaching and guidance activities" such as the formation of teaching plans, preparation of teaching materials, formation of examination question papers, preparation for supplementary lessons, meeting with pupils' parents, making contacts with pupils' homes, etc., account for 19%, 21% and 27%, of their time respectively. Teachers' study hours account for around 12% (6 hours) of the total teaching load at each school level. The percent of hours devoted to "clerical work" is around 7% of the total. This consists of time for classroom management, school affairs, classroom accountant's business, etc. Hours for "clerical work" plus those for "auxiliary activities" such as other service activities in school and in the PTA add up to about 10% of the total teaching loads of teachers at each school level.

Figure 34. Composition of Teaching Loads of Local Public School Teachers by Type of Service


Direct teaching and guidance activities
Indirect teaching and guidance activities
Teachers' study hours
Clerical work
Auxiliary activities and others
Rest hours and others
0 10 20 30 40 50 60 70 80 90 100%
Elementary school teachers
Lower secondary school teachers
Upper secondary school teachers

Note: Actual numbers are given in Basic Table 51.

b. Standard Teaching Hours in Other Major Countries

In Japan, the number of teaching hours of local public elementary and lower secondary school teachers is decided by each principal within the limit of normal duty hours. For this reason there is no uniform standard effective throughout the country.

In France, the standard number of teaching hours for secondary school teachers varies in accordance with the kind of teaching certificate the teacher has acquired. In general, teachers having certificates whose requirements for aquisition are severer take fewer teaching hours. In the Federal Republic of Germany, the standard number of teaching hours for secondary school teachers varies between academic and non-academic type schools. Furthermore standard teaching hours are decreased on the basis of age.

Table 53. Standard Teaching Hours per Week in Various Major Countries

Country	Elementary school teachers	Secondary school teachers		Note
	School hours		School hours	
Japan	26	Lower secondary Upper secondary	24 19	These are the hours upon which the fixed number of teachers is calculated in the Standard Law.
France	30	Teachers, having *agrégé* Others	15 18	Teaching hours of teachers in secondary schools who are in charge of music and art or experiments and practices range from 20 to 38.
Germany (F.R.)	29	Gymnasien Realschulen	24 27	These figures show the average number in all the states. There is a decrease in the number of teaching hours ranging from 2 to 4 hours for teachers over 50 years old.
U.S.S.R.	24		18	

Note: In 1965, the national average of teaching hours in the United States was 36 school hours for elementary school teachers and 37 for secondary school teachers.

(5) Teacher Training and In-Service Training

a. Teacher Training System

The existing system of teacher training in Japan is an open system. All persons who have acquired the necessary credits as provided in the Education Personnel Certification Law in universities with courses approved by the Minister of Education as adequate for issuance of teachers certificates are given such certificates. In practice there is a teachers training college or faculty established by the government in each prefecture, which plays an important role in the training of teachers for elementary and secondary schools, especially for elementary schools.

In other major countries, with the exception of teachers in elementary schools in France and the U.S.S.R. all teachers are trained in institutions of higher education. In those two countries as a rule elementary school teachers are trained in institutions specifically for teacher training while teachers of secondary schools

Table 54. Teacher Training Systems in Various Major Countries

Country	Type of institution	Years of study in the institution	Years of education received before the entry to the institution	Total years of education received at the time of graduation	Years of internship	Total years needed to become a full teacher	Remarks
<Teachers of elementary schools>							
Japan	Universities or faculties whose main aim is teacher's training	4	12	16	–	16	
U.S.A.	Teacher training colleges	4	12	16	–	16	
	Universities	4	12	16	–	16	
England & Wales	Teacher training colleges	3	13	16	1	17	
France	Normal schools	4	9~10	13~14	3 months	13~14 3 months	
Germany (F.R.)	Teacher training colleges	3	13	16	2	18	
U.S.S.R.	Normal schools	4	8	12	–	–	Teachers of grade 1~4

Table 54. Teacher Training Systems in Various Major Countries –Continued–

Country	Type of institution	Years of study in the institution	Years of education received before the entry to the institution	Total years of education received at the time of graduation	Years of internship	Total years needed to become a full teacher	Remarks
< Teachers of lower secondary schools >							
Japan	Universities or faculties whose main aim is teacher's training	4	12	16	–	16	
	Universities	4~5	12	16~17	–	16~17	
U.S.A.	Teacher training colleges	4~5	12	16~17	–	16~17	
	Universities	4~5	12	16~17	–	16~17	
England & Wales	Teacher training colleges	3	13	16	1	17	Teachers of modern schools.
	Departments of education in universities	1	16	17	1	18	Teachers of grammer schools.
France	Ecole normale supérieure (Higher teacher training college)	3~4	14	17~18	–	17 and more	Teachers of lycée
	Universities	4~5	13	17~18	–	17 and more	
Germany (F.R.)	Universities & Colleges	4	13	17	1~2	18~19	
U.S.S.R.	Education university	5	10	15	–	–	Teachers of grade 5~8
	Universities	5	10	15	–	–	Teachers of grade 9~10

Note: The term of internship in the U.S.A. varies by district and state.

attend either professional schools or universities. In the United States, persons with certain basic qualifications and having acquired the credits necessary for teaching are given licenses while in France and Germany even graduates of teachers training colleges are required to take a national examination to acquire their certificates. In

England and Wales there is no national examination but "area training organizations" which are groups of all teacher's training colleges within a specific area are responsible for qualifying teachers.

b. Training of Teachers

It is obvious that there are some problems to be solved from the viewpoint of teacher's training for the future, e.g., the composition of teachers according to the institutes they graduated from, the balance of supply and demand of teachers in different areas, and the balance of teachers according to the subjects they teach.

Among the newly recruited teachers in March, 1969 the percent of public school teachers who were graduates of national teacher's training colleges or faculties was 53% in elementary schools, 44% in lower secondary schools and 18% in upper secondary schools. In this figure the newly recruited include teachers, assistant teachers and instructors who are graduates of previous years. The total number of graduates of national teacher's training colleges has hardly changed over the years, and graduates of ordinary universities are required to fulfil the balance of supply and demand. This means that when the demand for teachers increases, the percent who are graduates of national teacher's training colleges decreases.

The number of persons who graduated from universities or junior colleges and acquired teacher's certificate is 123,000. Among them 30,000 were actually employed as teachers. Looking at the figures by type of schools, the number of those who acquired certificates is 25 times that of those actually employed in the case of lower secondary schools, and 12 times that of those actually employed in upper secondary schools, while it is only 1.4 times as high in the case of elementary schools. This indicates that in some regions the pressure of supply and demand is high. In the case of the teachers of lower secondary schools fifty-one percent of the 49,000 persons who acquired teachers certificates are graduates of junior colleges, but of them only 491 persons were actually recruited.

To aid in analyzing the regional differences in the balance of supply and demand of teachers, the figures for recruitment and for these leaving the profession in 1967–68 is shown by prefectures in Basic Table 53. It indicates that the differences are rather large.

In five prefectures the percent of those recruited is higher than that of those who left the profession at all levels. In the three prefectures adjacent to Tokyo which are overpopulated due to recent in-migration the tendency is especially remarkable. Conversely there are eleven prefectures where the per cent of those who left the profession is higher than that of those recruited at all levels. In these

prefectures a population out-migration is more or less visible. In order to meet this population mobility it is necessary to formulate a plan to balance the supply and demand of teachers over rather large regions.

Regarding the balance of supply and demand of teachers according to the subjects they teach, one notes a shortage of mathematics teachers. Both in lower secondary schools and upper secondary schools, as compared with other subjects, mathematics has the lowest percent of teachers with formal certificates for that subject.

In lower secondary schools, next to mathematics, Japanese language has the next lowest per cent of teachers with formal certificates to teach that subject.

Generally speaking most lower secondary schools have fewer than eleven classes. Since the number of teachers a school can employ is limited by its size, in these schools with fewer classes it is impossible to have teachers with formal certificates for every subject. This results in increases in the percent of teachers without formal certificates for some subjects they teach.

Table 55. The Proportion of Teachers with Certificates in the Subjects They Teach (1968)

School level	Japanese language	Social studies	Mathematics	Science	Foreign languages
	%	%	%	%	%
Lower secondary schools	76.7	87.1	67.7	83.6	83.0
Upper secondary schools	94.1	95.7	86.2	93.5	94.3
Total	83.2	90.5	74.6	87.7	87.8

Note: Actual numbers are given in Basic Table 52.

c. In-Service Training for Teachers

In Japan, the Ministry of Education and the prefectural boards of education have made special efforts to improve the quality of teachers by supporting organizations for research and education and sponsoring seminars and lectures. Among the major seminars or lectures held by governmental authorities are training courses for principals and vice-principals, seminars on curriculum and seminars on various subjects. There are also programs to make use of universities for the in-service training of teachers. There are programs which send teachers of elementary and secondary schools to universities for retraining, programs which send teachers of specific subjects related to industry to universities or industrial

firms, and programs which send teachers in charge of the education of the handicapped to universities. In addition there are various courses open to the general public in universities which are available for teacher's reeducation.

The organization and practice of in-service training for teachers differ from country to country and their objectives and forms are remarkably diversified. In the United States it is notable that in-service training is closely connected with the qualification and subsequent evaluation of teachers. For instance, universities give credits required for senior teachers' certificates to those who take summer courses or university extension courses operated by the university. States and local authorities often also open special courses or workshops for advanced qualifications and remuneration. Generally speaking, in the United States both undergraduate and graduate courses of universities are open even in the evening, making it easier for teachers to obtain higher levels of reeducation without leaving their jobs.

In England and Wales, the Department of Education and Science, the area training organizations, local education authorities, and colleges of education are in charge of in-service training for teachers. The Department of Education and Science constantly operates 1 year courses of remedial education for teachers on different subjects.

In France there are three types of in-service training. The first is for informing teachers of new developments in education including structural reforms; the second is for the purpose of issuing teaching licences; and the third involves seminars or training courses for the general improvement of one's qualifications. In Germany the practice of in-service training for teachers is different from one state to another. It is, however, common for all states to have several institutes for in-service training which are in charge of the regular retraining of teachers. In the U.S.S.R. universities are open in the evening and there are correspondence courses for the purpose of improving the qualifications of teachers in elementary and secondary education. Teachers are admitted to these courses without examination.

The above are all courses of in-service training for teachers with formal certificates. In France there is, in addition, a system which gives three months training to trainees in normal schools before they receive formal certificates. In Germany trainees are obliged to attend training seminars several times a month during their first two years in the profession.

d. Guidance to Teachers

In Japan the Ministry of Education, prefectural boards of education and municipal boards of education are cooperating to establish a suitable network of guidance for teachers. There are teacher consultants in the boards of education in charge of advising teachers on professional affairs in school education. The number of consultants is increasing every year. The educational research institutes in most of the prefectures play an important role in terms of teacher's in-service training by giving instruction to teachers conducting experimental training and practical lessons.

Furthermore, the Ministry of Education and prefectural boards of education publish and distribute guide books as a means of in-service training for teachers.

Table 56. Teacher Consultants (Full-Time) in Boards of Education

Year	Total	Teacher consultants	Teacher consultants with teacher's positions
1959	1,834	977	857
1961	2,911	845	2,066
1969	3,987	885	3,032

In other major countries, as was seen above, various schemes of in-service training play an important role in the improvement of teachers' qualifications. In addition, administrative inspection is well developed in these countries. In the United States there are about 21,000 counsellors in the states and local boards of education. The counsellors give guidance and advice to teachers on educational methods or on subject content and sometimes they are in charge of the evaluation of teachers.

In England and Wales there are about 500 H.M. Inspectors, and they have responsibilities as divisional inspectors or as staff inspectors. Local authorities may, and the larger ones invariably do, appoint their own inspectors. The H.M. Inspectors and the local inspectors give guidance and advice to the schools in accordance with the basic directions of the Department of Education and Science and the local educational authorities. While there are no written curriculum standards in England and Wales, the inspectorate plays the practical role of standardizing educational contents and methods. In France the guidance and supervision of teachers is administrated under a centralized inspectorate. At the

national level there are inspectors in the Ministry of Education who have responsibilities varying according to school level and subject. In local administrative districts inspectors are also appointed. The evaluation of teachers' achievements and their guidance is administered under the inspectorate. In Germany guidance and evaluation are undertaken by inspectors of the local educational authorities. In the U.S.S.R. there is an established inspectorate in each Republic and inspectors of the Republic's Ministry of Education supervise local inspectors in counties or local districts and cities.

(6) Leaders of Social Education

Leadership in social education involves not only the leading members of organizations, staffs of institutes and administrative staffs but also the entire leadership structure of all grass roots organizations and so it is impossible to treat this aspect simply in numerial figures.

Table 57. Increase in the Number of Staff Members for Social Education

Year	Social education consultants	Institutes for social education				
		Consultants in public halls (1)	Librarians	Consultants in museum	Staff members in institutes for youths	Staff members in public social physical education institutes
1963	2,661	3,018	1,311	383	410	2,600
1968	3,104	3,549	1,516	419	1,372(2)	3,001

Year	Leaders in classes for social education	Instructors of youth classes	Leaders of physical education
1963	241,283	48,105	29,101
1968	257,039	34,028	34,385

Note: (1) The numbers of consultants in public halls in this table include only full time workers. This is also the case with staff members in social physical education institutes. Other numbers include those with simultaneous duties.
(2) As of 1969.

In the boards of education there are social education consultants in charge of promoting social education by means of organized programs of activities designed to provide the people in the community with opportunities to participate in social education. There are also consultants in public halls in charge of the various projects of these halls. It is worth noting that the number of staff members in institutes for youth education has tripled in the 5 year period from 1963 to 1968.

2. Facilities, Teaching Materials, Teaching Equipment and School Environment

(1) Facilities

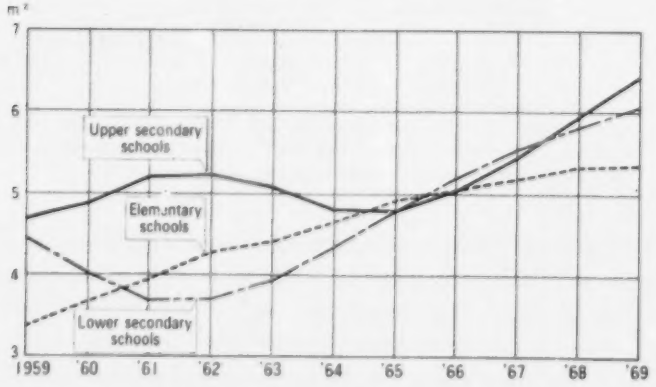
a. School Buildings

In the two decades after World War II the national and local governments made all possible efforts to reconstruct the schools destroyed by the war, to extent the years of compulsory education, and to meet the shortage of classrooms caused by the expansion of population in the age group born after the end of the war. Now in the third decade, since the above mentioned measures have been accomplished, efforts are centered on the improvement of both ordinary classrooms and special classrooms on a basis of elevating the standards of required facilities, constructing new gymnasiums and carrying out other measures to improve the quality of school facilities.

With regard to the improvement of facilities of local public schools, in 1969 the school building space per student was 5.34 m^2, 6.09 m^2, and 6.44 m^2, respectively for elementary schools, lower secondary school and upper secondary schools. This indicates that at all three levels the space has constantly been increased.

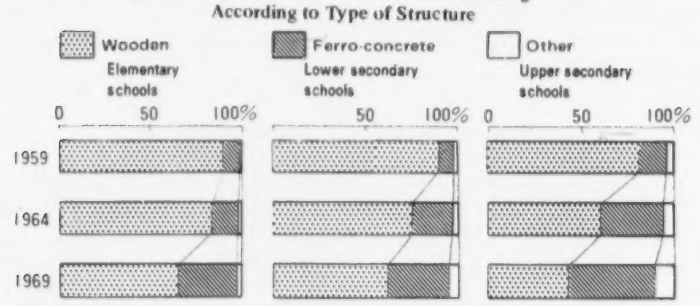
As to the construction of school buildings, there are "wooden", "ferro-concrete" and "other" buildings. In 1969 wooden buildings accounted for 63%,

Figure 35. Local Public School Building Space per Pupil



Note: Actual numbers are given in Basic Table 54.

Figure 36. Space of Local Public School Buildings According to Type of Structure



Note: Actual numbers are given in Basic Table 55.

58%, and 40% respectively for elementary, lower secondary, and upper secondary schools. Comparing this with the figures of 10 years ago one observes that wooden buildings have very rapidly decreased and been replaced ferro-concrete buildings. Nevertheless in spite of this improvement some problems still remain. For instance in overpopulated areas the shortage of classrooms is obvious, and obsolescent buildings amount to 14.9%, 8.5% and 14.6% of the wooden buildings in elementary, lower secondary, and upper secondary schools respectively.

There are provisions in the Law Concerning Class-size and the Standards of Fixed Number of Educational Personnel with regard to the standard size of classes, but in reality the construction of buildings has not reached these standards. There is a shortage of 10,000 ordinary classrooms for elementary schools and 2,000 for lower secondary schools. This represents 3.5% and 1.8% of the total required ordinary classrooms of elementary schools and lower secondary schools.

There is a shortage of 24,000 special types of classrooms such as science rooms, music rooms, art rooms, homemaking rooms, and vocational rooms in elementary schools, and 18,000 in lower secondary schools. Most schools have science rooms and music rooms, but not many schools have art rooms, homemaking rooms or vocational rooms. Looking at the shortage according to differences in area, i.e. areas with expanding populations, isolated areas and other areas, one notes that the shortage of ordinary classrooms in the areas with expanding populations is a serious problem. In these areas there is an 11.0% shortage of ordinary classrooms in elementary schools and a 7.3% shortage in lower secondary schools. About 10% of the need in these areas is being met with prefabricated tentative buildings or gymnasiums and special rooms tentatively remodeled.

In order to solve this problem the government began its third five-year plan for improving local public educational facilities in 1969, and is trying to overcome the shortage by putting special emphasis on the shortage of classrooms in the overpopulated areas.

Table 58. Shortage of Classrooms (1969)

a. Elementary Schools

	Ordinary classrooms			Special rooms		
	Legally required rooms	Rooms lacking	Rate of shortage	Legally required rooms	Rooms lacking	Rate of shortage
			%			%
School expanded by population mobility	48,378	5,339	11.0	8,357	4,396	52.6
Schools in isolated areas	22,765	535	2.4	7,405	4,718	63.7
Other schools	209,704	3,856	1.8	45,619	15,359	33.7
Total	280,847	9,730	3.5	61,381	24,473	39.9

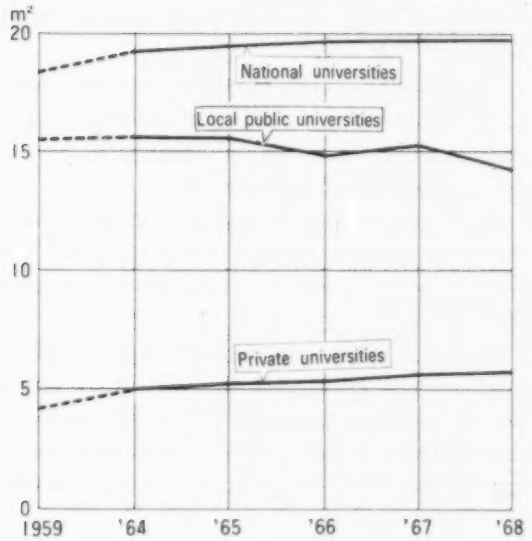
b. Lower Secondary Schools

	Ordinary Classrooms			Special Rooms		
	Legally required rooms	Rooms lacking	Rate of shortage	Legally required rooms	Rooms lacking	Rate of shortage
			%			%
School expanded by population mobility	8,721	634	7.3	3,501	1,350	38.6
Schools in isolated areas	7,937	267	3.4	7,180	3,183	44.3
Other schools	108,450	1,335	1.2	55,255	14,003	25.3
Total	125,108	2,236	1.8	65,936	18,536	28.1

Note: "Schools expanded by population mobility" means those schools short of classrooms because of rapid increases in the number of classes owing to population expansion in the area.

National, local public and private universities have all greatly increased their ownership of buildings. But as enrolment has increased the space per student has only marginally improved. As of 1969 the space per student was 19.5 m^2, 14.2 m^2, and 5.7 m^2 respectively in national, local public and private universities. The figure for the private universities is only about one quarter that of the national universities.

Figure 37. School Builing Space per Pupil



Note: Actual numbers are given in Basic Table 56.

In other major countries in order to meet the extension of the years of compulsory education and the increased enrollment in higher educational institutions efforts are being made to expand school buildings at the elementary, secondary and higher educational levels.

In the United States the Elementary and Secondary Education Act of 1965 and the Higher Education Facilities Act of 1963 allowed the Federal Government to give subsidies to improve the facilities and equipment of elementary and secondary schools in areas with large concentrations of poor families, and to both public and private universities.

In England and Wales the new construction of school buildings in areas with rapid expanding population, the replacement or remodeling of obsolescent school buildings, and the new construction or enlargement of school buildings to meet the need for reforming secondary education into a comprehensive style are all being undertaken with great emphasis.

In France, the Sixth Five Year Plan was made for the improvement of facilities in order to meet the expansion of education resulting from both the extension of

compulsory education and the expansion of enrollments in higher educational institutions.

In Germany and the U.S.S.R., efforts are being made to integrate the small sized elementary schools in rural areas.

In addition to the expansion and improvement of facilities mentioned above, as seen in chapter two, completely new types of classrooms are appearing as new educational methods and structures are being introduced.

b. Facilities for Physical Education in Schools

The facilities for physical education in elementary and lower secondary schools have recently been rapidly improved owing in large part to national subsidies, but there is still plenty of room for improvement when they are compared to the ordinary parts of school buildings.

In 1969, 71.2% of local public elementary schools and 78.0% of local public lower secondary schools had gymnasiums, but only 31.3% of the elementary schools and 27.2% of the lower secondary schools had swimming pools. The percent of schools which have swimming pools is much lower than that of schools which have gymnasiums. By 1973 it is anticipated that, all schools with more than 300 pupils will have a swimming pool.

Table 59. Percent of Public Schools with Gymnasiums and Swimming Pools

Year	Gymnasiums		Swimming pools	
	Elementary schools	Lower secondary schools	Elementary schools	Lower secondary schools
	%	%	%	%
1959	55.0	43.7	–	–
1961	63.1	61.6	16.9	11.0
1965	64.6	64.9	20.4	13.7
1966	66.3	68.0	24.2	16.6
1967	68.0	71.5	30.5	22.2
1968	69.3	74.7	–	–
1969	71.2	78.0	31.3	27.2

Note: Actual numbers are given in Basic Table 57.

Almost all local public upper secondary schools have a gymnasium, but only 27.5% of them have swimming pools. The construction of gyms for judo and kendo (Japanese fencing) and the improvement of illumination in the playgrounds at evening course upper secondary schools are also being undertaken.

c. Facilities for Social Education

There are various sorts of institutes or facilities for social educational activities since the activities are very diversified.

Table 60 shows the changes in the last 5 years regarding social educational institutes or facilities established by the national government or local public bodies (Libraries and museums include those established by private funds). One notes that the number of facilities for youth, social educational facilities and museums have increased while the number of public halls has decreased considerably. This is because some branches which had not actually functioned were closed or integrated with others. As far as main buildings is concerned there was an increase of 238 halls.

Table 60. Facilities for Social Education

Year	Public halls	Libraries	Museums	Youth centers		Children's culture centers	Audio-visual libraries	Public facilities for physical education
				National	Local public			
1963	19,410	810	294	2	79	15	815	1,805
1968(3)	13,785	825	338	9(1)	175(2)	28	879	4,731

Note: (1) 1970
(2) 31 out of the 175 are centers in cities.
(3) In 1970, 4 Children's Houses in Nature were also built.

Besides physical educational facilities established with public funds for the general public there are physical educational facilities such as playgrounds, swimming pools, gymnasiums, baseball grounds and so forth established by private enterprises or for the use of individual firms. According to a survey conducted by the Ministry of Education in 1969 of the total only 25% are public facilities.

(2) Materials and Equipment

In order to improve the teaching materials and teaching equipment of compulsory schools the government has established "standards regarding teaching materials" and created a 10 year-plan to improve teaching materials starting in 1967. The estimated cost is 160,000,000,000 yen of which half is to be paid by the government. According to these standards 2,223 items, including slide projectors, tape recorders and pianos, which are necessary to carry out the teaching described in the course of studies will become available. Table 61 shows to what extent the schools are properly equipped. In terms of the standard elementary school with 18

classes and the standard lower secondary school with 15 classes the former has reached 48.0% of the standards and the latter 44.0%.

Table 61. Degree to Which the Standards Regarding Educational Materials is Satisfied in Public Elementary and Lower Secondary Schools (1969)

	All subjects	Common	Japanese language	Social studies	Mathematics	Music	Fine arts & handicraft	Physical education	Foreign languages	Guidance
	%	%	%	%	%	%	%	%	%	%
Elementary schools (18 classes)	48.0	58.9	57.4	36.6	29.4	51.4	27.3	52.5	–	–
Lower secondary schools (15 classes)	44.0	51.4	40.2	32.0	30.3	40.5	22.1	48.1	35.7	30.0

Note: Actual numbers are given in Basic Table 58.

With regard to materials for science education the attempted improvements are separate from the plan mentioned above and are based on the Law for the Promotion of Science Education. However the achievement is not very high. At the end of March, 1968 only 53% of the standards for elementary schools, 49% of those for lower secondary schools and 43% of those for upper secondary schools had been achieved.

Improvement of materials for mathmatics education, such as table electronic computors, has been promoted since 1969.

In addition to those measures explained above there is a Law for the Promotion of Industrial Education based on which the government supplies a part of the expenses to acquire facilities or equipment for experiments or field training in vocational education in both local public and private secondary schools. This means in the case of lower secondary schools equipment necessary for experiments or field training in technical and homemaking courses can be acquired with governmental subsidies, and in case of upper secondary schools, necessary facilities or equipment for experiments or field training in vocational courses for agriculture, industries, trade, fisheries, homemaking and nursery can be acquired with governmental subsidies.

In addition to improving teaching materials and equipment on the basis of the "Standards for Teaching Materials", the Law for the Promotion of Science Education, the Law for the Promotion of Industrial Education and others, the

important task of introducing new teaching machines as they are developed by advanced technology should not be forgotten.

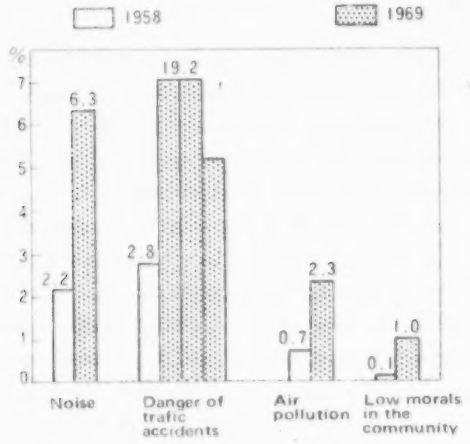
(3) School Environment

According to a survey conducted by the Ministry of Education in 1969, 22.7% of the local public elementary schools and 24.7% of the public lower secondary schools consider their educational environment bad. Most of these schools raised "danger of traffic accidents on the way to school" as the main cause of this. "noise", "air pollution", and "low moral standards in the community" also accounted for the bad environment, in that order. Comparing this with results of a survey conducted in 1958 all these defects have increased at a rapid pace. Notably, the citation of danger of traffic accidents on the way to school has increased seven fold and from January to June of 1969, 54,000 pupils suffered from traffic accidents. Among them 9,000 cases were caused by accidents occuring when pupils were going to school in the morning or coming back home in the afternoon or during school activities such as excursions or observations outside of school. Schools near roads with heavy traffic or with factories, military bases or airports nearby are often victims of noise. In the worst cases sometimes classes have to be stopped for a while. As examples of sufferings caused by air pollution, the case in Yokkaichi City can be pointed out where, owing to sulphurous acid gas many residents got asthma. There is also the case of photochemical smog caused by the exhaust gas of automobiles. This has recently attracted people's attention in general and it has had a strong effect on pupils' health as well.

Schools are making efforts to protect themselves from these disasters by attempts to improve local traffic conditions, by the teaching of transportation safety, by constructing double windows or ventilation apparatus, by building soundproof rooms and by evacuation of classrooms for a certain period to places with clean air. Summer classes in resort areas are also encouraged, and health inspection is conducted more frequently to detect diseases as early as possible. Especially for the pupils of compulsory schools special care should be given to the environment of the school from the viewpoint of their age and stage of development. Urgent countermeasures should be taken with the colaboration of the government, prefectures, local governments, industrial circles and schools.

The worsening of the environment is a big problem throughout advanced nations where industry is highly developed. Consequently the problem of securing favorable school environments and education on environment is now often a

Figure 38. Causes of Environmental Danger in Public Elementary and Lower Secondary Schools (Percent)



Note: Actual numbers are given in Basic Table 52.

subject of discussion in conferences of international education organizations. President Nixon of the United States presented a report on environment to the Congress in August, 1969 and stressed the importance of teaching pupils of elementary and secondary schools the importance of protecting the environment. There the President also pointed out that in universities, research departments on environmental problems should be established and efforts should be made to develop the technicians and engineers necessary for the solution of this problem.

3. Assistance for the Encouragement of School Attendance

(1) Measures for Needy and Semi-Needy Pupils

For children of compulsory school age who have difficulty in attending school due to economic reasons, the Japanese national government has taken various measures to encourage their attendance under the provisions of the Daily Life Protection Law, the School Education Law, the Law Concerning the National Treasury's Share in the Encouragement of School Attendance for Pupils Having Financial Difficulties, and others.

To children from needy or semi-needy families as defined by the Daily Life Protection Law, assistance is offered to cover expenses for school supplies, transportation to school, goods required to attend school, school lunches, school excursions, medical treatment, school security insurance and others. To handicapped children in special schools, various assistance is offered to encourage them to attend school. Moreover, the policies for children's welfare under the Child Welfare Law and other ordinances are also devised to encourage children of school age to attend school. For instance, to tubercular pupils, in addition to supplying goods required for learning and medical treatment, special assistance is offered to help them attend school.

With the intention of preserving the health of students who work during the day and study in evening part-time upper secondary schools and of assisting them in their school attendance, a part of their expense for supper is subsidized from the national budget.

Few major countries other than Japan assist pupils directly so as to encourage the school attendance of school age children. However, the study of their systems for encouragement of school attendance must be seen in connection with their whole social welfare policies.

In the United States, schools usually provide such school items as crayons, notebooks and so forth. For transportation, school buses are used, and because the state governments or other agencies offer subsidies to purchase the buses, parents scarcely bear any direct expense. In consequence a system such as Japan's in which assistance is given directly to pupils hardly exists in the United States.

In England and Wales, for pupils having difficulties in regard to transportation to school, dormitories are available and if their parents cannot afford it, the local education authorities bear the expense for them.

In France, as one step in the encouragement of school attendance, a system exists called "La Caisse des Ecoles" (School Funds), by which the national government gives financial assistance to needy children through municipalities. This system was launched in 1867 for the purpose of encouraging the children of poorer families to attend school, but later it was expanded to cover the children of average families too. In accord with the provisions of the 1951 Law for Subsidies to Families Having School Children, the subsidy from the state was largely increased.

(2) Scholarships and Aid to Students

The present scholarship programs are carried out mainly by the "Japan Scholarship Foundation", a special corporation, but local public bodies, schools, foundations, companies and others also offer scholarships. Observing the percent distribution of scholarship holders by donator in 1967, students receiving scholarships from the Japan Scholarship Foundation accounted for 76% of the total, and next to this, students receiving scholarships from local public bodies amounted to 12%.

Table 62. The Percent Distribution of Scholarship Holders by Body Providing the Scholarship (1967)

School level	Total	Japan scholarship Foundation	Other Organizations					
			Total	Local public bodies	Schools	Foundations (Corporations for scholarship	Companies (Corporations for profit)	Private and others
	%	%	%	%	%	%	%	%
Total	100.0	76.2	23.8	11.8	2.9	5.8	1.0	2.3
Upper secondary school	100.0	66.2	33.8	21.5	2.2	5.7	1.2	3.2
Technical college, university, graduate school & others	100.0	83.1	16.9	5.2	3.4	5.9	0.8	1.6

Note: Actual numbers are given in Basic Table 60.

The program of the Japan Scholarship Foundation has been expanded year by year since its launching in 1944 so that by April of 1969, the total number of students who had received scholarships from the Foundation reached 1,930,000, and the amount of scholarship money awarded totaled 149.8 billion yen. The scholarships from the Foundation can be divided into two types, general scholarship loans and special scholarship loans. The latter type are offered to students highly capable but with difficulties in attending school due to financial reasons.

Table 63. Indices of Increase in the Number and Amount of Scholarships Granted by the Japan Scholarship Foundation

School year	Upper secondary education			Higher education		
	Amount of aid (1)	Number of students aided (1)	Percent of total number of students	Amount of aid (1)	Number of students aided (1)	Percent of total number of students (2)
			%			%
1959	100	100	3.0	100	100	19.6
1964	207	116	2.5	222	126	16.6
1969	206	107	2.4	387	163	12.9

Note: Actual numbers and amounts are given in Basic Table 61.
(1) The amounts and the numbers of the aided are shown by indices (1959=100).
(2) Scholarship holders as a percent of all students in universities, graduate schools, junior colleges, technical colleges, national training institutes for nursing teachers, and national training institutes for engineering teachers.

Recently, in the upper secondary schools and the higher education institutions, the percent of scholarship holders has been decreasing. The ordinary amount of the general scholarship loans per month provided to university students has been placed at 3,000 yen for more than 10 years, and the proportion of persons receiving special scholarship loans provided for developing capable human resources is still low. Therefore it is necessary to increase the number of students receiving scholarships and the amount of monthly allowance from the view point of encouraging learning. At the same time some measures should be sought to put more emphasis on encouraging the talented as is done in other major countries.

Observing the scholarship systems in major countries, in the United States, financial aids to students enrolled in higher education institutions may be divided roughly into three types: (1) grants, (2) loans, (3) guaranteed interest scholarship loans. In the last type the Federal Government guarantees the payment of interest on scholarships loaned by banks to students. In addition, there are also private groups providing many kinds of scholarships. Most students receive some kind of scholarship.

In Britain, students of higher educational institutions who have passed the examination for the G.C.E. are automatically eligible to receive scholarships, but when the amount to be supplied is determined, family income is taken into consideration.

In France, the amount of the scholarship grant is characteristically decided in accordance with detailed standards prescribed by level of school and financial

condition of families. Furthermore, whether the recipient lives in a boarding house or at home, whether the area is urban or rural, and other factors are all taken into account in the standards.

In the Federal Republic of Germany, a new law concerning scholarships was enacted in 1969, which enriched the scholarship system for students of secondary schools. A quarter of the university students receive scholarships given by the Federal Government in coordination with each state. In addition, there are, though limited, a number of scholarships given by churches and other organizations to specially talented children.

In the U.S.S.R. there is, in addition to a general scholarship system, a special scholarship system. Students with especially good achievement are awarded special scholarships, the amount of which exceeds that of the general scholarships by 25%.

Table 64. Kinds and Amounts of Scholarships Granted by the Japan Scholarship Foundation (1969)

Kind of scholarship	Monthly amount loaned	Percent distribution of scholarship holders
	Yen	%
General scholarship loans	–	55.1
Upper secondary school	1,500	18.7
University	3,000	30.9
Graduate school	–	5.5
Master course	13,000	–
Doctor course	18,000	–
Special scholarship loans	–	41.8
Upper secondary school	3,000	14.1
University	5,000~12,000	27.7
Others	–	3.1

Note: Actual numbers are given in Basic Table 62.

Table 65. Governmental Scholarship Programs in Various Major Countries

Country	Kind of scholarship and beneficiaries	Body providing scholarship	Amount	Ratio or number of scholarship holders	Grant or loan
U.S.A.	*Educational Opportunity Grants (undergraduate only)	Federal government	yen 72,000~360,000 per year	295,000 (estimated in 1969)	Grant
	*National Defense Education Grants (undergraduate and postgraduate)	Federal government (bearing 90% of expenses for the program) plus University (bearing 10%)	Different according to the student's demand, maximum per year 360,000 for undergraduate, 900,000 for post-graduate	8% 582,000 (estimated in 1969)	Loan
Britain	*Scholarship for students in secondary education	Local education authority	Maximum per year, 104,000	–	Grant
	*Scholarship for students in higher education	Department of education and science and local education authority	Undergraduate 300,000 (average) Postgraduate 472,000 (average)	90% of undergraduates 50% of postgraduates	
France	*Scholarship for students in secondary education	State	15,000~76,000 per year	37.4%	Grant
	*Scholarship for students in higher education	State	52,000~275,000 per year	21.0% (1965)	
Germany (F.R.)	*Scholarship for students in secondary education	Federal government and state	For students in upper secondary education, 180,000 (standard)	–	Grant
	*Scholarship for students in higher education	(1) Cooperative aid organization between federal government and states	(1) 300,000 per year (1965)	(1) 25.9% (1966)	(1) Grant Loan
		(2) Federal government	(2) –	(1) –	(2) Grant

Table 65. Governmental Scholarship Programs in Various Major Countries
–Continued–

Country	Kind of scholarship and beneficiaries	Body providing scholarship	Amount	Ratio or number of scholarship holders	Grant or loan
U.S.S.R.	*Scholarship for students in secondary vocational school	Federal government	yen –	85% or more	Grant
	*Scholarship for students in higher education	Federal Government	139,000~192,000 per year	80% or more	

4. Education in Densely and Sparsely Populated Areas

The rapid growth of the society and economy caused by the Income Doubling Policy and the High Rate of Economic Growth Policy begun around 1960 has induced a wide range of population mobility which has proved itself an important problem at present. Increases or decreases of the general population have created increases or decreases in the number of classes, and consequently in the number of teachers and classrooms. The shortage of classrooms in the public elementary and lower secondary schools in overpopulated areas, into which great numbers have come, is obvious. There was a shortage of 5,974 classrooms in May, 1969. Measures were taken to meet this shortage of classrooms, but as a matter of fact about 40% of the rooms constructed for this purpose are prefabricated buildings, in addition to which many rooms for special study are tentatively being used as ordinary classrooms. Various other measures are also taken. For instance a hall or gymnasium is walled into several rooms, the number of pupils in a class is increased, or such irregular systems as the double shift are employed. Cases in which buildings outside the school are rented are also seen. Meanwhile, it is becoming more and more difficult to secure sites for schools, and this is a great problem for the municipalities concerned.

As a result of the shortage of school buildings and grounds, the schools in the affected areas have only small playgrounds, with the result that pupils lack sufficient exercise due to the size of playgrounds. Their durability is below that of pupils in other areas as shown by chinning, arm bending and stretching exercises,

strength of back muscles, etc. Furthermore, the number of overweight children has been increasing.

The Ministry of Education has given special attention to the problem of the shortage of school buildings in the overpopulated areas in its Third Five Year Plan for Improving the Facilities of Public Educational Institutions, and it has taken such measures as providing grants for the expense of readjusting land for constructing new school buildings, and considerably raising the ceiling on the sum for the local public debt for the purchase of school sites.

Table 66. Temporary Measures Regarding the Shortage of Ordinary Classrooms (1969)

School level	Number of classrooms needed	Temporary measures				
		Pre-fabricated buildings	Diversion of special study rooms	Division of halls, gymnasiums, etc.	Diversion of administrative rooms	Others
Elementary school	5,359 (100.0%)	2,278 (42.7)	1,459 (27.3)	113 (2.1)	541 (10.1)	948 (17.8)
Lower secondary school	634 (100.0%)	274 (43.2)	231 (36.4)	3 (0.5)	53 (8.4)	73 (11.5)

Meanwhile, in sparsely populated areas with large scale population out-migration, there are many problems in securing the services of teachers, transportation to schools, health services and so on. In 1970 the number of public schools in so called "isolated areas" with poor transportation services and cultural defects accounted for 21.8% of all elementary schools and 18.9% of all lower secondary schools. The number of pupils in such elementary and lower secondary schools amount to 4.3% at both levels. Generally speaking, most of the schools in isolated areas consist of only one class or a single multi-grade-class. Moreover, pupils are in bad health, and their physique is relatively poor in terms of height, weight and other elements.

In order to improve these conditions, the Ministry of Education is making efforts to raise the educational standards in isolated areas on the basis of the "Law for the Promotion of Education in Isolated Areas". With a view to securing the services of teachers in these areas, steps have been taken such as special allowances for teachers serving in isolated areas, special allowances for teaching multi-grade-

classes, special raises in salary with the purpose of promoting personnel exchanges between these areas and other areas, construction of teachers' residences, etc.

As for transportation and health services, the national government has taken such means as supporting the local authorities in the purchase of school buses and boats, bearing transportation fee expenses for pupils who live far from school, bearing expenses for boarding in dormitories, building bathrooms in schools, sending medical doctors and dentists, and increasing the number of nursing teachers for elementary and lower secondary schools in areas without doctors.

Other measures taken with regard to education in isolated areas include research assignments on education in isolated areas to a certain number of schools, compilation and publication of data on education in isolated areas, and publication of guidance books for teachers relating to instruction in multi-grade classes, and others.

In addition, in April of 1970, The Law Concerning Emergency Steps for Sparsely Populated Areas was enacted. It contains a step which provides that, when small size schools in sparsely populated areas are consolidated, the national treasury's share of the expenses for new construction or enlargement of school buildings or gymnasiums and for construction of teacher's residences shall be raised from a half to two thirds of the total cost.

Table 67. Educational Data in Isolated Areas

	Number of teachers per school, etc.			Pupil's physique		
	Average number of pupils per school	Average number of teachers per school	Percent of teachers under 30 years of age	Height	Weight	Girth of chest
	persons	persons	%	cm	kg	cm
Isolated area	75.9	5.5	26.6	137.8	31.9	67.4
Whole country	375.4	14.4	19.0	139.7	33.2	67.9

	Percentage of pupils who suffer from diseases				
	Trachoma	Infectious skin disease	Conjunc-tivities	Asthma	Disease caused by any parasite
	%	%	%	%	%
Isolated area	1.97	2.43	3.62	0.08	0.37
Whole country	1.20	1.39	3.94	0.25	0.20

CHAPTER IV. ALLOCATION AND SOURCES OF EDUCATIONAL EXPENDITURES

In the foregoing chapters, an attempt was made to assess the present standards in Japanese education both quantitatively and qualitatively in comparison with other countries. In this chapter, the educational expenditures, which lay the foundation for both quantitative and qualitative developments in education, will be treated. The present level of educational expenditures in Japan and the pattern of distribution, as well as the allocation of the burden of educational expense will be considered.

1. Educational Expenditures in the National Economy

(1) Educational Expenditures in Relation to National Income

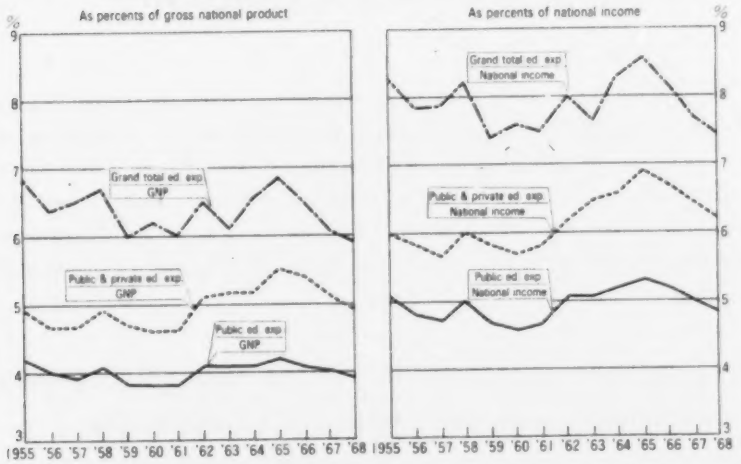
The scale of the national economy of a country is generally expressed in terms of its national income or gross national product (GNP), and it is natural that the amount a country spends for education is decided primarily within the framework of its national income. However, as it is generally accepted that the importance a nation attaches to education can be measured by the portion of its national income spent for education, a broad assessment of the degree or intensity of various nation's educational efforts can be made by comparing the percents of their national income devoted to education.

In Japan, *public* education expenditure, *public and private* education expenditure and *grand total* education expenditure from 1955 to 1968, are shown as percents of gross national product and of national income in Figure 39. (The definitions of these terms are given in the notes to Figure 39.)

Figure 39 shows that since 1955 public, public and private, and grand total education expenditure as percents of gross national product and of national income have fluctuated year by year. In 1968, the percents of national income were 4.8%, 6.2% and 7.4%, respectively, and those of gross national product were 3.9%, 4.9% and 5.9%, respectively.

Public education expenditure as a percent of national income is compared among various major countries in Figure 40.

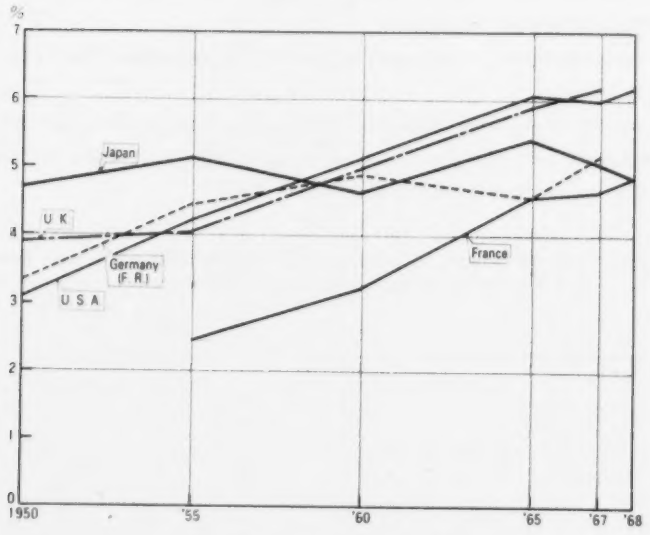
Figure 39. Public, Public and Private, and Grand Total Education Expenditures as Percents of Gross National Product and of National Income in Japan, 1955–1968



Note: Actual numbers are given in Basic Table 64.

1. *Public education expenditure* is the total amount spent for education by the national, prefectural and municipal governments; namely, the net total expenditure disbursed from public funds for school education (including pre-primary and higher education), social education, and educational administration.
2. *Public and private education expenditure* is the sum of "public education expenditure" (explained above) plus "private education expenditure". The latter is the total amount spent by all types of private schools, including kindergartens and universities, as well as private 'miscellaneous' schools.
3. *Grand total education expenditure* is the sum of public and private education expenditure (explained above) plus the total estimated amount of "direct expenditures" by parents and students for school education. "Indirect expenditures" by parents and students, such as tuition, admission fees, etc., which are disbursed through the revenue-accounts of public authorities or private schools, are already included in "public and private education expenditures".

Figure 40. Public Education Expenditure as a Percent of National Income in Various Major Countries



Note: Actual numbers are given in Basic Table 65.

Until the mid-1950's, the percent was higher in Japan than in any of the other countries shown. Since then however, the percent in Japan has fallen below that in most other countries. This is because the Japanese figure has remained approximately the same whereas it has continued to grow rapidly in the other countries.

Table 68. Public and Private Education Expenditure in Japan and the U.S.A. as Percents of National Income

Year	Japan	U.S.A.
	%	%
1955	6.0	5.1
1960	5.7	7.5(1)
1965	6.9	8.7
1968	6.2	–

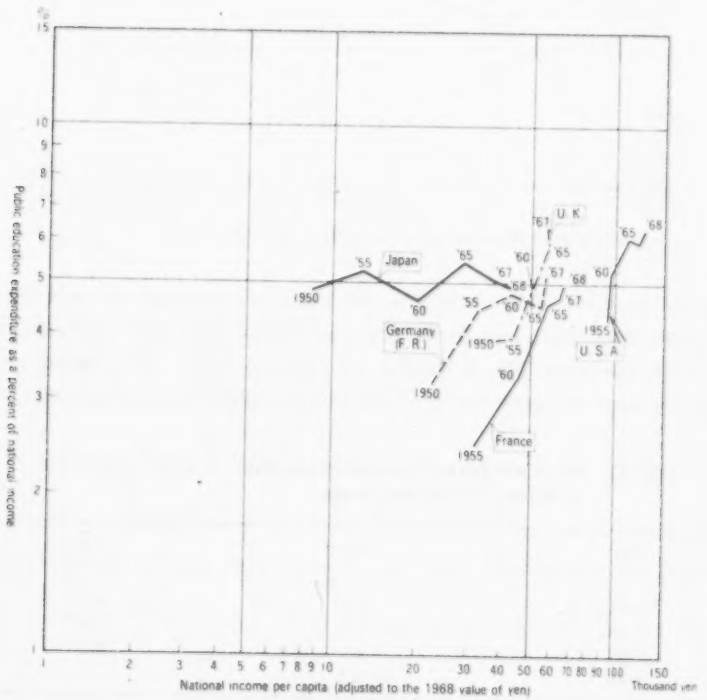
Note: Actual numbers are given in Basic Table 66.
(1) 1961

The educational expenditures shown above are only public education expenditures. Table 68 shows *public and private* education expenditure as a percent of national income in Japan and the United States of America, the only country for which sufficient data was available.

The table shows that the percent in Japan has lagged behind that of the U.S.A. since around 1960.

The correlation between change in the percent of national income devoted to public education and the amount of national income per capita in Japan and various other major countries is shown in Figure 41.

Figure 41. National Income per Capita and the Percent of National Income Devoted to Public Education Expenditures in Various Major Countries



Note: Actual numbers are given in Basic Table 65.

Despite the relatively low level of her national income per capita, Japan has, until recently, devoted a higher percent of her national income to education than any of the other major countries. In recent years, however, the rapid expansion of national income in Japan has not been accompanied by a rise in the percent of national income devoted to education and, as a result, the percent in Japan has begun to lag behind those of the other countries.

(2) Educational Expenditures in Relation to Total Governmental Expenditures

The percent of total governmental expenditure allocated to education (public education expenditure) from 1950 to 1968 is shown in Table 69. Total governmental expenditure here means the net total of financial outlays by national, prefectural and municipal governments, excluding over-lap.

Table 69. Changes in the Percent of Total Governmental Expenditure Allocated to Public Education

Year	Percent of total governmental expenditures allocated to education	Total governmental expenditures as a percent of national income
	%	%
1950	17.5	27.0
1955	21.6	23.6
1960	21.1	21.9
1965	22.2	24.0
1966	21.3	24.5
1967	21.1	23.7
1968	20.5	23.5

Note: Actual numbers are given in Basic Table 67.

Since 1955 the percent of total governmental expenditure allotted to education has generally been around 21–22%. Breaking this down, the percents of total national, prefectural and municipal expenditures allocated to education, have ranged between 12–13%, 29–34% and 20–22% respectively. It should be noted that, in recent years, the percents of prefectural and municipal expenditures allocated to education have declined, as a result of the rise in the proportion devoted to other types of expenditures (cf. Basic Table 68).

Table 70 compares the percent of total governmental expenditure allotted to education in Japan with those in various other major countries.

Table 70. Percents of Total Governmental Expenditures Allocated to Education in Various Major Countries

Country	Year	Public education expenditure as a percent of total governmental expenditure		Total governmental expenditure as a percent of national income	
		Including self-defense expenditure	Excluding self-defense expenditure	Including self-defense expenditure	Excluding self-defense expenditure
		%	%	%	%
Japan	1963	21.5	22.7	23.9	22.5
	1967	21.1	22.1	23.7	22.5
U.S.A.	1963	14.6	20.6	38.4	27.2
	1966	14.2	19.5	41.2	30.4
U.K.	1964	13.5	16.3	41.3	34.2
	1966	13.2	15.6	45.2	38.2
France	1963	14.1	17.7	30.3	24.1
	1967	16.3	21.1	28.3	21.9
Germany (F.R.)	1963	9.6	11.4	42.2	35.5
	1966	11.2	13.0	42.4	37.0
U.S.S.R.	1963	15.8	18.7	51.5	43.3
	1967	17.4	20.0	51.1	44.7

Note: Actual numbers are given in Basic Table 69.

Although the scope of total governmental expenditure is not uniform for all the countries, it is still helpful to evaluate the weight given to education within the total financial outlay of each country, by comparing the percent of total governmental expenditures allocated to education. The percents in Japan are higher than those in any other country. However, it is necessary, at the same time, to consider the fact that, in Japan, the percent of national income occupied by governmental expenditure is relatively low compared to these other countries.

2. Distribution of Educational Expenditures

In the previous section, total educational expenditures were considered both in relation to national income and to total governmental expenditures. In this section, an analysis will be made of how educational expenditures are distributed among the different fields of education, the different levels of education and among national, local public and private school. In addition, an assessment will be made of educational expenditures in terms of the amounts per pupil and such amounts per

pupil as distributed among such categories as teachers' salaries, and facilities and equipment. In all cases comparisons will be offered with other major countries.

(1) Distribution by Educational Field and by Educational Level

The distribution of total public and private education expenditures in Japan among different fields of education, for 1950–1968 is analyzed in Table 71.

Table 71. Changes in the Percent Distribution of Total Public and Private Education Expenditures in Different Educational Fields in Japan

Year	Total	School education expenditures	Social education expenditures (1)	Miscellaneous school expenditures	Educational administration expenditures (2)
	%	%	%	%	%
1950	100.0	86.8	3.0	1.4	8.8
1955	100.0	91.0	1.8	2.2	5.0
1960	100.0	90.8	2.0	2.6	4.6
1965	100.0	89.8	2.3	2.9	5.0
1966	100.0	89.3	2.5	3.1	5.1
1967	100.0	89.2	2.6	3.1	5.1
1968	100.0	89.0	2.7	3.2	5.1

Note: Actual numbers are given in Basic Table 70.

(1) Social education expenditures include only such expenditures as fall under the jurisdiction of prefectural and municipal boards of education.

(2) Educational administration expenditures include the total amount spent by national and local governments for educational administration plus expenditures by school juridical persons (establishers of private schools), etc. for the management of their schools (including kindergartens and universities).

As is shown in the table, roughly ninety per cent of total public and private educational expenditures have been spent on school education (including kindergartens and universities), while less than three to five percent has been spent on social education, miscellaneous schools and educational administration. It should be noted, however, that training in industry, individuals' expenditures for their own self-education, etc. were not included in social education expenditures due to lack of sufficient data. Thus, the percents spent on social education should generally be higher than those shown in Table 71.

The distribution of school education expenditures among different levels of education is shown in Table 72.

Table 72. Changes in the Percent Distribution of Public and Private School Education Expenditures by Educational Level in Japan

Year	Total	Pre-primary education	Compulsory education			Upper secondary education	Higher education
			Total	Elementary	Lower secondary		
	%	%	%	%	%	%	%
1950	100.0	0.9	69.9	37.7	32.2	12.8	16.4
1955	100.0	2.1	65.5	41.4	24.1	16.1	16.3
1960	100.0	1.8	61.9	37.7	24.2	18.2	18.1
1965	100.0	2.2	52.8	32.8	20.0	22.1	22.9
1966	100.0	2.4	52.4	33.0	19.4	20.9	24.3
1967	100.0	2.6	52.6	33.5	19.1	20.1	24.7
1968	100.0	2.7	53.0	34.2	18.8	20.1	24.2

Note: Actual numbers are given in Basic Table 71.

During 1950–55, a high of nearly 70% of the total public and private education expenditures in Japan was spent on compulsory education. This was due in part to the lengthening of the period of compulsory education. Thereafter, however, this percent had declined and since 1965 has remained fixed at about 52%. On the other hand, the percents spent on upper secondary and higher education levels have risen considerably as a result of the expansion of enrollments at these levels. The rapid rise in the percent spent on higher education is especially conspicuous.

The distribution of public school education expenditures, namely expenditures for national and local public schools (including kindergartens and universities), exclusive of expenditures for private schools, among different educational levels in Japan as compared with those in various major countries is shown in Table 73. The distribution of public school education expenditures by educational level as a percent of national income in various major countries, is shown in Table 74.

Table 73. Percent Distribution of Public School Education Expenditures by Educational Level in Various Major Countries

Country	Year	Total public school education expenditures	Primary education expenditures	Secondary education expenditures	Higher education expenditures
		%	%	%	%
Japan	1956	100.0	46.4	42.1	11.5
	1962	100.0	45.8	39.3	14.9
	1967	100.0	41.9	42.1	16.0
	1968	100.0	42.5	41.8	15.7
U.S.A.	1956	100.0	86.3		13.7
	1963	100.0	76.1		23.9
	1967	100.0	72.9		27.1
	1968	100.0	72.4		27.6
England & Wales	1956	100.0	81.2		18.8
	1963	100.0	82.4		17.6
	1967	100.0	77.1		22.9
Germany (F.R.)	1954	100.0	86.3		13.7
	1961	100.0	47.9	33.8	18.3
	1966	100.0	40.3	35.1	24.6
U.S.S.R.	1962	100.0	39.5	44.1	16.4
	1967	100.0	83.6		16.4
	1968	100.0	82.6		17.4

Note: Basic numbers are given in Basic Table 72.
The numbers for higher education in Britain include those of private universities, because expenditures of universities in Britain are mostly financed by subsidies from the national government.

Table 74. Public School Education Expenditures as a Percent of National Income by Educational Level in Various Major Countries

Country	Year	Primary education	Secondary education	Higher education
		%	%	%
Japan	1962	1.8	1.6	0.6
	1967	1.9	1.9	0.7
	1968	1.9	1.9	0.7
U.S.A.	1963	4.5		1.4
	1967	4.9		1.8
	1968	5.0		1.9
England & Wales	1963	3.1		0.6
	1967	3.5		1.0
Germany (F.R.)	1961	2.0	1.4	0.9
	1966	1.7	1.5	1.1
U.S.S.R.	1962 (1)	1.9 (1)	2.1	0.8
	1967	4.0		0.9

Note: Actual numbers are given in Basic Table 72.
(1) Includes expenditures for kindergarten education.

Both the percent of public school education expenditures allocated to higher education and the percent of national income allocated to public higher education have risen rapidly in recent years in all countries but Japan where they have continued to be rather stagnant.

(2) Educational Expenditures per Pupil

Table 75. Changes in the Amount of Japanese Public and Private School Education Expenditures per Pupil by Educational Level

a. Real Amounts (1)

(Unit: yen)

Year	Pre-primary education	Compulsory education	Upper secondary education	Higher education
1935	13,896	11,911	42,186	167,253
1950	12,058	13,136	20,555	100,309
1954–56	19,002	22,162	37,535	129,346
1960	22,929	32,317	54,415	193,926
1965	34,890	61,023	79,117	294,696
1968	44,125	84,979	102,197	283,325

b. Indices

Year	Indices taking compulsory education as the base				Incides taking 1954–56 amounts as the base			
	Pre-primary education	Compulsory education	Upper secondary education	Higher education	Pre-primary education	Compulsory education	Upper secondary education	Higher education
1935	117	100	354	1,404	73	54	112	129
1950	92	100	156	764	63	59	55	78
1954–56	86	100	169	584	100	100	100	100
1960	71	100	168	600	121	146	145	150
1965	57	100	130	483	184	275	211	228
1968	52	100	120	333	232	383	272	219

Note: More detailed figures are given in Basic Table 73.
(1) Real amounts are adjusted to the 1968 value of yen.

Table 75 shows the amount per pupil of public and private school education expenditures in Japan by level of education.

Taking compulsory education as the base in each of the years shown, the indices for all the other educational levels show a continuous decline with the decline in higher education being the most conspicuous. Analyzing the indices of each educational level with the average of the years 1954–56 as the base figure, it is evident that educational expenditures per pupil in compulsory education have nearly quadrupled, and those in upper secondary education, have nearly tripled, while those in higher education have merely doubled.

School education expenditures per pupil in Japan, are further analysed in

Table 76. Changes in the Amount of School Education Expenditure per Pupil by Educational Level and by the Kind of Establishing Body

a. Real Amounts

(Unit: yen)

Year	Pre-primary education		Upper secondary education		Higher education		
	Local public	Private	Local public	Private	National	Local public	Private
1955	13,791	22,869	41,724	22,284	197,058	184,239	89,201
1960	21,147	23,725	58,970	43,136	291,201	285,546	144,284
1965	36,393	34,285	82,500	72,215	553,608	339,532	205,394
1966	40,663	37,730	87,577	71,966	544,869	341,336	211,812
1967	45,664	40,915	96,768	73,907	552,945	352,893	205,245
1968	49,161	42,462	111,227	81,597	566,089	355,760	199,063

Table 76. Changes in the Amount of School Education Expenditure per Pupil by Educational Level and by the Kind of Establishing Body –Continued–

b. Indices Taking National or Local Public School Expenditures as the Base

Year	Pre-primary education		Upper secondary education		Higher education		
	Local public	Private	Local public	Private	National	Local public	Private
1955	100	116	100	53	106	93	45
1960	100	112	100	73	100	98	49
1965	100	94	100	88	100	61	37
1966	100	93	100	82	100	63	39
1967	100	90	100	76	100	64	37
1968	100	86	100	73	100	63	35

c. Indices Taking 1955 as the Base

Year	Pre-primary education		Upper secondary education		Higher education		
	Local public	Private	Local public	Private	National	Local public	Private
1955	100	100	100	100	100	100	100
1960	153	104	141	194	148	155	162
1965	265	150	198	324	281	184	230
1966	295	165	210	323	277	185	237
1967	331	179	232	332	281	192	230
1968	356	186	267	366	287	193	223

Note: More detailed figures are given in Basic Table 73.

Table 76 according to the kind of establishing body (national, local public or private).

Taking national or local public school expenditures as the base, the table shows that, throughout all educational levels with the exception of pre-school education in 1960–65, the amount per pupil in national and local public schools was well over that in private schools. Moreover, such disparities between national and local public schools, on the one hand, and private schools, on the other, have expanded in recent years.

Comparing the indices within each educational level, taking 1955 as the base, it is evident that the increase in the indices for private schools is greater in secondary education than in pre-school and higher education.

Table 77 shows public and private expenditure per pupil by purpose and level, for the year 1968.

Table 77. Public and Private Education Expenditure per Pupil by Educational Level and by Major Purpose in 1968

a. National and Local Public Institutions (1)

(Unit: yen)

Educational level	Total	Recurrent expenditures		Capital outlay	Debt service
		Salaries of teachers	Other recurrent expenses (2)		
Pre-primary education	49,161	27,407	7,970	13,176	608
Upper secondary education	111,227	60,187	22,459	26,144	2,437
Higher education	566,089	237,132	117,411	211,546	–

b. Private Institutions

Educational level	Total	Recurrent expenditures		Capital outlay	Debt service
		Salaries of teachers	Other recurrent expenses (2)		
Pre-primary education	42,462	17,718	10,766	10,430	3,548
Upper secondary education	81,597	35,421	13,924	17,807	14,445
Higher education	199,063	60,945	42,492	63,499	32,127

Note: Actual numbers are given in Basic Table 73.

(1) In Table a., educational expenditures for pre-primary and upper secondary educational levels are those of local public institutions, while for higher education they are those of national institutions.

(2) "Other recurrent expenses" include expenses for consumables, travel, maintenance and repair of buildings, school meal services, contributions to mutual aid funds of teacher associations, expenses for pensions, etc.

As shown in the table, the per capita expense for debt service is conspicuously large in private institutions at all educational levels being as high as 32,000 yen (approximately $90) per student in private higher education institutions.

On the other hand, per student expenditures for teachers' salaries which constitute a large part of recurrent expenditures, are considerably lower in private institutions than in national and local public institutions at all educational levels.

The indices of educational expenditures per pupil for national and local public institutions in various major countries by educational level, using national income per capita as a base of 100 are shown in Table 78.

Table 78. Indices of Public School Education Expenditures per Pupil in Various Major Countries, Taking National Income per Capita as the Base

Year		Japan	U.S.A.	Britain	Germany (F.R.)	U.S.S.R.
1963	National income per capita	100	100	100	100	100
	Elementary & secondary education expenditures per pupil	20	21	24	19	19
	Higher education expenditure per student	164	94(1)	250(2)	161	130(4)
1967	National income per capita	100	100	100	100(3)	100
	Elementary & secondary education expenditures per pupil	22	22	27	20(3)	17
	Higher education expenditures per student	140	79(1)	263(2)	188(3)	96(4)

Note: Basic numbers are given in Basic Table 74.

(1) The numbers are those of state universities and junior colleges. In the U.S.A., however, the unit costs in private higher education institutions are considerably higher those in public institutions.

(2) The numbers are those of universities. Although the universities in the country are privately established, they are akin to public institutions in financial matters. The 1967 number is actually that of 1966. The numbers for primary and secondary education are ones in England & Wales only.

(3) 1966

(4) Per full-time student.

With per capita national income as a base of 100, the table shows that the indices of primary and secondary school expenditures per pupil remain fairly constant in all the various major countries, however the indices of per student expenditure for higher education, have declined in countries such as Japan, U.S.A. and U.S.S.R., while the indices in Britain and Germany (F.R.) have risen considerably.

The changes in per pupil expenditures in public primary and secondary schools by prefecture show considerable disparity although they are being reduced gradually.

Table 79. Disparities among Prefectures in Educational Expenditures per Pupil in Compulsory Schools in Japan

a. Elementary Schools

(Unit: yen)

Year	Highest	Lowest	Average (A)	Standard deviation (B)	Coefficient of deviation $\left[\frac{(B)}{(A)} \times 100\right]$
1950	9,526	4,624	6,079	986	17.54
1955	17,061	10,516	13,067	1,496	11.43
1960	27,715	15,640	20,056	2,687	13.40
1965	75,426	42,142	51,960	6,816	13.12
1968	111,674	66,106	80,163	8,991	11.22

b. Lower Secondary Schools

Year	Highest	Lowest	Average (A)	Standard deviation (B)	Coefficient of deviation $\left[\frac{(B)}{(A)} \times 100\right]$
1950	14,094	8,702	11,164	1,189	10.65
1955	20,271	12,874	16,329	1,501	9.19
1960	41,682	22,561	27,542	3,410	12.38
1965	71,664	43,782	53,797	5,347	9.94
1968	117,787	73,364	85,272	8,312	9.75

Note: Actual numbers are given in Basic Table 75.

(3) Distribution by Purpose

In this section, school and social education expenditures in Japan will be analyzed according to purpose of expenditure. Table 80 shows the distribution of school education expenditures by major category of purpose and by educational level.

The percent of capital outlay for compulsory education first increased around 1950 due to the creation of the new system of lower secondary schools, and again around 1960 to accommodate children born in the so-called "baby boom" years immediately after the War. In recent years, however, the ratio of recurrent expenditures to capital outlay, has remained approximately in the ratio of 80 to 20.

Expenditures for teachers' salaries which constitute a large part of the recurrent expenditures, make up 60% of the total expenses in compulsory education while the other recurrent expenditures constitute less than 20%. At the

Table 80. Changes in the Percent Distribution of Public and Private School Education Expenditures in Japan by Educational Level and by Major Category of Purpose

Year	Pre-primary education				Compulsory education			
	Recurrent expenditures		Capital outlay	Debt service	Recurrent expenditures		Capital outlay	Debt service
	Salaries of teachers	Other recurrent expenditures			Salaries of teachers	Other recurrent expenditures		
	%	%	%	%	%	%	%	%
1935	61.0	28.4	10.6	–	65.4	10.8	23.8	–
1950	54.3	21.8	23.9	0.0	53.7	17.7	28.6	–
1955	41.5	23.3	29.5	5.7	60.6	18.4	19.5	1.5
1960	45.5	25.8	21.4	7.3	59.5	16.4	21.6	2.5
1965	48.2	20.0	26.1	5.7	59.6	19.4	18.7	2.3
1968	45.6	22.8	25.2	6.4	57.4	19.7	20.2	2.7

Year	Upper secondary education				Higher education			
	Recurrent expenditures		Capital outlay	Debt service	Recurrent expenditures		Capital outlay	Debt service
	Salaries of teachers	Other recurrent expenditures			Salaries of teachers	Other recurrent expenditures		
	%	%	%	%	%	%	%	%
1935	65.5	17.6	16.9	–	66.6	18.3	15.1	–
1950	68.1	13.3	18.6	0.0	47.8	23.2	29.0	0.0
1955	64.5	16.3	18.0	1.2	55.4	20.1	20.7	3.8
1960	55.3	16.8	24.5	3.4	47.0	21.4	26.3	5.3
1965	49.9	15.6	27.1	7.4	36.1	18.6	38.1	7.2
1968	51.5	19.4	23.1	6.0	36.5	21.1	34.0	8.4

Note: Actual numbers are given in Basic Table 73.

other educational levels, the percents for recurrent expenditures are rather low, compared to those in compulsory education, (around 70% in pre-primary and upper secondary and less than 60% in higher education) while the proportions for capital outlay and debt service have recently become higher than those in compulsory education.

Table 81 shows the distribution by type or establishing body of the figures already shown in Table 80.

Table 81. Changes in the Percent Distribution of Japanese School Education Expenditures by Educational Level According to Major Purpose and Type of Establishing Body

a. Pre-primary Education

Year	Public institutions				Private institutions			
	Recurrent expenditures		Capital outlay	Debt service	Recurrent expenditures		Capital outlay	Debt service
	Salaries of teachers	Other recurrent expenditures			Salaries of teachers	Other recurrent expenditures		
	%	%	%	%	%	%	%	%
1935	70.0	20.0	10.0	–	54.7	34.2	11.1	–
1950	54.5	28.0	17.5	–	54.3	17.6	28.1	0.0
1955	56.8	22.4	20.7	0.1	36.0	23.6	32.7	7.7
1960	63.4	19.6	16.9	0.1	38.3	28.2	23.2	10.3
1965	66.2	11.9	21.5	0.4	41.2	23.1	28.0	7.7
1968	55.8	16.2	26.8	1.2	41.7	25.4	24.6	8.3

b. Upper Secondary Education

Year	Public institutions				Private institutions			
	Recurrent expenditures		Capital outlay	Debt service	Recurrent expenditures		Capital outlay	Debt service
	Salaries of teachers	Other recurrent expenditures			Salaries of teachers	Other recurrent expenditures		
	%	%	%	%	%	%	%	%
1935	67.4	15.1	17.5	–	58.4	26.7	14.9	–
1950	69.1	12.5	18.4	–	53.4	26.0	20.6	0.0
1955	67.1	15.7	16.7	0.5	44.8	21.4	27.9	5.9
1960	62.0	15.8	21.3	0.9	32.7	20.4	35.1	11.8
1965	56.5	16.6	24.8	2.1	34.5	13.2	32.4	19.9
1968	54.1	20.2	23.5	2.2	43.4	17.1	21.8	'17.7

Table 81. Changes in the Percent Distribution of Japanese School Education Expenditures by Educational Level According to Major Purpose and Type of Establishing Body –Continued–

c. Higher Education

Year	Public institutions				Private institutions			
	Recurrent expenditures		Capital outlay	Debt service	Recurrent expenditures		Capital outlay	Debt service
	Salaries of teachers	Other recurrent expenditures			Salaries of teachers	Other recurrent expenditures		
	%	%	%	%	%	%	%	%
1935	82.8		17.2	–	41.1	47.0	11.9	–
1950	51.1	15.0	33.9	–	46.2	30.6	23.2	0.0
1955	66.5	12.2	21.3	–	39.2	29.0	22.8	9.0
1960	61.7	13.4	24.9	–	31.9	28.7	28.7	10.7
1965	40.3	22.7	37.0	–	29.7	15.5	40.4	14.4
1968	41.9	20.7	37.4	–	30.6	21.4	31.9	16.1

Note: Actual numbers are given in Basic Table 73.

The percents of capital outlay and debt services for pre-primary education have been continuously high throughout the post-war period, especially in private institutions; in public institutions as well, these have recently become rather high. With regard to upper secondary education, the increase of capital outlay caused by the expansion of private upper secondary schools after the war, as well as the accompanying increase of debt services, is noteworthy especially in private schools from 1960 to 1965. In public schools, too, capital outlays increased during the period of rapid enrollment expansion starting in 1962, caused by the entrance of the so-called "baby boom" children.

Finally in higher education, a rise in the percent of capital outlay began around 1960, in both national and private institutions while, the rise in the percent for debt services is conspicuous in private institutions due to the accumulation of debts incurred by such institutions.

Turning to social education expenditures, Table 82 shows the percent distribution of expenditures by major purpose. In social education, the proportion of capital outlay is large and has been increasing in recent years because of the rapid increase in expenditures for sports facilities.

Table 82. Changes in the Percent Distribution of Social Education Expenditures by Major Purpose

Year	Total	Recurrent expenditures	Capital outlay	Debt services
	%	%	%	%
1950	100.0	66.1	33.7	0.2
1955	100.0	69.4	30.2	0.4
1960	100.0	59.3	40.4	0.3
1965	100.0	53.1	44.9	2.0
1968	100.0	49.5	47.2	3.3

Note: Actual numbers are given in Basic Table 76.

Table 83 compares the distribution of Japanese school education expenditures by major purpose with those in other countries, for national and local public institutions only. It is clear that the proportion of capital outlay differs greatly among countries, due to differences in the degree of development at each level.

Table 83. Percent Distribution of Public School Education Expenditures by Education Level and by Major Purpose in Various Major Countries

Education level	Country	Year	Total	Recurrent expenditures			Capital outlay	Debt services
				Total	Salaries of teachers	Other recurrent expenditures		
			%	%	%	%	%	%
Primary & secondary	Japan	1968	100.0	76.6	50.0	26.6	20.9	2.5
	U.S.A.	1968	100.0	84.0	–	–	13.1	2.9
	England & Wales	1967	100.0	76.8	–	–	14.0	9.2
	Germany (F.R.)	1966	100.0	70.9	56.2	14.7	29.1	–
Higher	Japan	1968	100.0	63.6	42.9	20.7	36.4	0.0
	U.S.A.	1965	100.0	80.1	–	–	19.9	–
	Britain(1)	1966	100.0	68.6	36.6	32.0	30.2	1.2
	Germany (F.R.)	1966	100.0	70.1	38.8	31.3	29.9	–

Note: Actual numbers are given in Basic Table 77.

(1) As for higher education in Britain, refer to the Note to Table 73.

3. Sources of Educational Expenditure

In the previous section, the distribution of educational expenditures was examined. In this section, the sources of such expenditures will be studied.

(1) Sources of Public Educational Expenditures

The sources of educational expenditures in Japan, as distributed between the national government and local public bodies (prefectures and municipalities) are analyzed in Table 84.

Table 84. Percent Distribution of Public Educational Expenditures by Source

Year	Total	Educational expenditures borne by the national government				Educational expenditures borne by local governments		
		Total	Direct expenditures	Subsidies	Local allocation tax grants	Total	Prefectures	Municipalities
	%	%	%	%	%	%	%	%
1950	100.0	51.6	10.2	3.7	37.7	48.4	26.2	22.2
1955	100.0	46.7	11.2	22.9	12.6	53.3	30.5	22.8
1960	100.0	47.8	11.6	22.5	13.7	52.2	30.2	22.0
1965	100.0	50.0	14.5	21.5	14.0	50.0	29.4	20.6
1968	100.0	49.5	15.3	20.4	13.8	50.5	30.5	20.0

Note: Actual numbers are given in Basic Table 78.

Educational expenditures of the national government include direct expenditures for education by the national government and national subsidies for local educational expenditures. In addition, they include those local allocation tax grants expended for education. These three kinds of expenditures are considered national expenditures and are borne by the national treasury. Total public educational expenditures are shared almost equally by the national government and by local public bodies throughout the years shown. The proportions borne by prefectures and municipalities are 30% and 20%, respectively. Although little difference is noted from year to year in the sources of public educational expenditures, in recent years, the proportion of direct expenditures by the national government has been gradually increasing.

In Table 85, the distribution of the sources of public educational expenditures in Japan are compared with those in the U.S.A. and Germany (F.R.).

Table 85. Percent Distribution of Public Educational Expenditures by Source in Various Major Countries

Country	Year	Total	Educational expenditures borne by the national government			Educational expenditures borne by local governments (prefectures, municipalities)
			Total	Federal	State	
		%	%	%	%	%
Japan	1962	100.0	48.4	–	–	51.6
	1967	100.0	49.8	–	–	50.2
	1968	100.0	49.5	–	–	50.5
U.S.A.	1959	100.0	45.7	9.0	36.7	54.3
	1967	100.0	53.4	11.7	41.7	46.6
	1968	100.0	54.0	12.2	41.8	46.0
Germany (F.R.)	1962	100.0	71.3	9.8	61.5	28.7
	1966	100.0	73.7	9.8	63.9	26.3
	1967	100.0	76.4	11.6	64.8	23.6

Note: Actual numbers are given in Basic Table 79.

A strict comparison is difficult among these countries, because both the U.S.A. and the Federal Republic of Germany are federal states, while Japan is not. However, in the U.S.A., where the local governments establish public primary and secondary schools and share almost half the burden of total public educational expenditures, paying salaries of teachers etc., the share borne by the federal government has recently been increasing annually, as a result of the Elementary and Secondary Education Act and the Higher Education Act. Moreover, the share borne by the state governments is also increasing.

In Germany (F.R.), where the state governments pay the salaries of teachers and share more than sixty per cent of the total public educational expenditures, the share of the local governments has also decreased, while those of the federal and state governments have increased. Such increases in the share by the central governments (federal or state governments) in total public educational expenditures reflect the growing national demand for education in these countries.

(2) Distribution of the Source of School Education Expenditures by Educational Level and by the Kind of Establishing Body

Table 86 analyzes the percent distribution of national, local public, and private school education expenditures, by educational level, for the year 1968.

Table 86. Percent Distribution of School Education Expenditures by Source, Establishing Body and Educational Level, 1968

Educational level	National		Local public			
	Expenditures by national government	Tuition fees, etc. (1) (2)	National subsidies	Expenditures by local governments (3)	Donations	Tuition fees, etc. (1) (2)
	%	%	%	%	%	%
Pre-primary	–	–	2.5	92.7	4.8	(18.1)
Compulsory	–	–	33.1	65.7	1.2	–
Upper secondary	–	–	2.9	90.7	6.4	(7.9)
Higher	100.0(4)	(3.0)	0.7	99.2	0.1	(7.1)

Educational level	Private						
	National subsidies	Local subsidies	Expenditures by establishing bodies (legal persons)	Donations	Loans	Beneficiaries' contributions (1) (2)	
						Tuition fees, etc.	Others
	%	%	%	%	%	%	%
Pre-primary	0.3	0.8	83.0	2.0	13.2	(75.1)	(8.6)
Compulsory	0.4	2.5	74.0	9.4	13.7	(58.7)	(15.0)
Upper secondary	0.7	4.0	72.3	5.2	17.8	(57.3)	(15.3)
Higher	3.1	0.1	67.8	8.8	20.2	(48.0)	(18.0)

Note: Actual figures are given in Basic Table 80.

(1) "Tuition fees, etc." and "other beneficiaries' contributions" are already included in "expenditures by national government", "expenditures by local governments" and "expenditures by establishing body (legal persons)". The percents for "Tuition fees, etc." and "Other beneficiaries' contributions" shown in the table were calculated from data in independent surveys.

(2) "Tuition fees, etc." includes tuition fees, admission fees, entrance examination fees, examination fees, and other fees. "Other beneficiaries' contributions" includes fees for experimental and workshop studies, contributions for expansion and improvement of facilities and equipment, etc.

(3) Local allocation tax grants are included in "expenditures by local governments."

(4) All expenditures for national pre-primary, compulsory, and upper secondary educational institutions are included in "Higher education."

When expenditures for local public schools in 1968 are examined, it is noted first that about one third of the expenditures for compulsory schools (primary and lower secondary schools) comes from national subsidies. At other educational levels, national subsidies account for less than three percent of the total expenditures, almost all of which were expenditures by local governments. Seven to eight per cent of the expenditures by local governments for upper secondary and higher education, and eighteen percent of such expenditures for pre-primary education (kindergartens), were from tuition fees, etc. and so the balance after such percents are deducted represents the real expenditures borne by local governments.

As for private institutions, at all educational levels, the share of national and local subsidies is less than three percent, with almost all educational expenditures being those of the establishing bodies (legal persons), donations and loans. Large percents of these expenditures were, however, represented by beneficiaries' contributions, namely tuition and other fees and other beneficiaries' contributions. In summary, private institutions in Japan depend on beneficiaries' contributions and loans for a large percent of their educational costs.

Table 87 compares school educational expenditures in Japan by source with those in other major countries.

Table 87. Percent Distribution of Educational Expenditures by Source and Establishing Body in Various Major Countries

a. Local Public Primary and Secondary Schools

Country	Year	Total	National government expenditure		Local government expenditure	Beneficiaries' contributions	Donations, etc.
			Federal	State			
		%		%	%	%	%
Japan	1965	100.0		27.1	66.8	2.5	3.6
	1968	100.0		26.1	69.5	1.8	2.4
U.S.A.(1)	1965	100.0	7.4	36.4	55.9	0.3	
	1968	100.0	8.0	37.3	54.4	0.3	
Germany (F.R.)	1959	100.0	0.0	60.4	39.6	–	–
	1966	100.0	0.8	61.5	37.7	–	–

Table 87. Percent Distribution of Educational Expenditures by Source and Establishing Body in Various Major Countries –Continued–

b. National and Local Public Institutions of Higher Education

Country	Year	Total	National government expenditure		Local government expenditure	Beneficiaries' contributions	Donations, etc.
			Federal	State			
		%	%		%	%	%
Japan	1965	100.0	86.2		10.4	3.4	0.0
	1968	100.0	88.6		7.9	3.5	0.0
U.S.A.	1963	100.0	17.6	39.7	4.4	38.3	
	1968	100.0	20.5	36.9	4.1	38.5	
Germany (F.R.)	1964	100.0	14.6	76.1	–	3.7	5.6
	1966	100.0	15.2	84.8(2)	–	–	–

c. Private Institutions of Higher Education

Country	Year	Total	National government expenditure		Local government expenditure	Beneficiaries' contributions	Donations, etc.
			Federal	State			
		%	%		%	%	%
Japan	1965	100.0	2.0		0.1	42.4	55.5
	1968	100.0	3.1		0.1	48.0	48.8
U.S.A.	1963	100.0	24.0	2.0	–	74.0	
	1968	100.0	31.7	1.2	–	67.1	
Britain	1964	100.0	86.7		1.0	5.3	7.0
	1966	100.0	87.7		0.7	4.9	6.7

Note: Actual numbers are given in Basic Table 81.

(1) Includes expenditures for kindergartens.
(2) Includes beneficiaries' contributions and donations, etc.

In all three countries shown the share of the national government is relatively high in public primary and secondary education expenditures.

The share of the national government for national and local public institutions of higher education, is high in the U.S.A. and Germany (F.R.), where a large percent of such institutions are established by the national or state governments as is the case in Japan. On the other hand, the share of beneficiaries' contributions and donations, etc. is relatively low in Japan and West Germany (F.R.), compared to the U.S.A.

In Britain where there are no national universities and private universities play a public role, more than eighty percent of the educational expenditures for private institutions of higher education are financed by national subsidies. In private universities in the U.S.A., as well, a relatively high percent of the costs are federally financed, a large percent of which are Federal subsidies for research and Federal funds for research contracts.

(3) Sources of Social Education Expenditures

Table 88 analyzes the percent distribution of social education expenditures by source in Japan and shows that almost all expenditures for social education are financed by local governments.

Table 88. Percent Distribution of Social Education Expenditures by Source

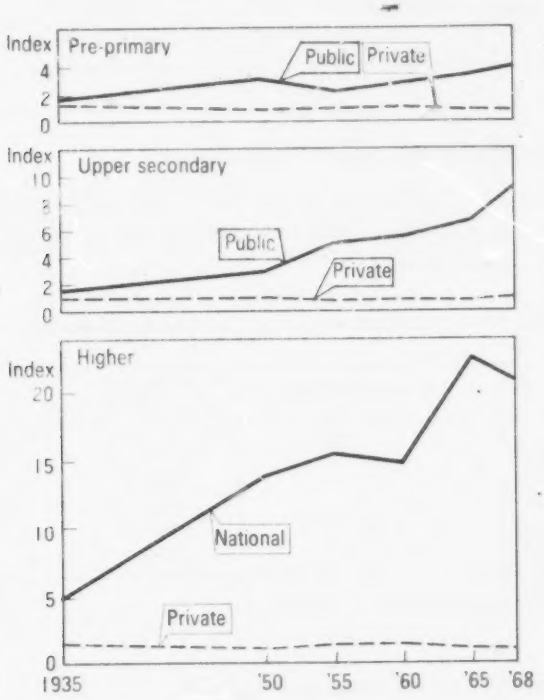
Year	Total	National subsidies	Expenditure by local governments	Donations
	%	%	%	%
1950	100.0	4.7	89.9	5.4
1955	100.0	2.5	96.1	1.4
1960	100.0	3.1	96.0	0.9
1965	100.0	3.6	96.3	0.1
1968	100.0	4.7	95.2	0.1

Note : Actual numbers are given in Basic Table 82.

(4) Beneficiaries' Contributions and Benefits

In this section the extent to which educational expenditures in national, local public and private schools, are financed by beneficiaries (students or parents) and the relationship between beneficiaries' contributions and benefits will be examined. Beneficiaries' contributions include tuition fees, admission fees, etc. paid by parents or students while beneficiaries' benefits include recurrent expenditures by schools, such as expenditures for instruction, maintenance, repair, auxiliary services, etc. Figure 42 shows the chronological changes in Japan in this relationship by educational level and by establishing body, using beneficiaries' contributions as the base.

Figure 42. Index of Recurrent Educational Expenditures with Beneficiaries' Contributions as the Base

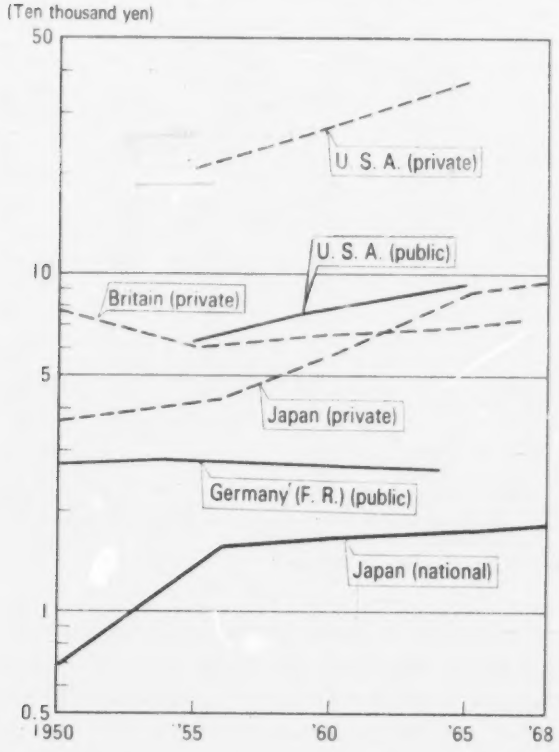


Note: Actual numbers are given in Basic Table 83.

At all educational levels, the indices in public schools have gradually increased. This is especially noticeable in national institutions of higher education. On the other hand, in private schools, the indices are relatively low at all educational levels.

Figure 43 shows the changes in the amount of beneficiaries' contributions (tution fees, etc.) per student in higher education in various major countries, while Table 89 contrasts such changes with those in personal consumption expenditures per capita.

Figure 43. Amount of Beneficiaries' Contributions per Student in Higher Education Institutions in Various Major Countries



Note: Actual numbers are given in Basic Table 84.

Table 89. Beneficiaries' Contributions and Personal Consumption Expenditures per Capita in Various Major Countries

(Unit: yen)

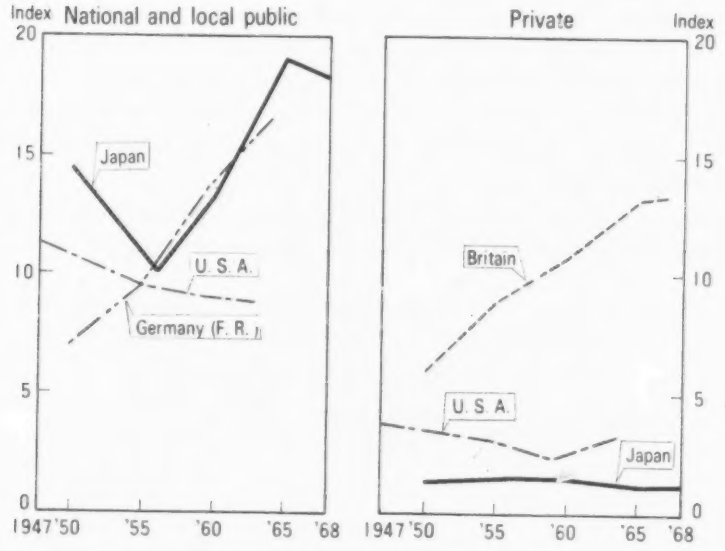
Country	Year	Public		Private		Personal consumption expenditure per capita	
		Tuition fees per student	Index	Tuition fees, etc.	Index	Actual amount	Index
Japan	1956	15,737	100	42,869	100	99,156	100
	1960	16,845	107	57,503	134	136,867	138
	1965	17,410	111	87,090	203	212,508	214
	1968	18,490	117	95,434	223	271,141	273
U.S.A.	1955	63,720	100	207,720	100	649,142	100
	1959	75,240	118	252,000	121	695,876	107
	1965	90,907	143	369,792	178	836,636	129
Britain	1955	–	–	63,653	100	318,902	100
	1960	–	–	65,887	104	357,091	112
	1965	–	–	70,445	111	400,032	125
	1967	–	–	72,327	114	411,869	129
Germany (F.R.)	1955	28,664	100	–	–	262,802	100
	1960	27,267	95	–	–	314,612	120
	1964	26,955	94	–	–	400,319	152

Note: Actual numbers are given in Basic Table 84.
Numbers are given in yen of 1968 value.

In private institutions in Japan, beneficiaries' contributions have risen in parallel with personal consumption per capita since 1956, while in national institutions they have remained at a relatively constant level over the same period. On the other hand, in public and private institutions in the U.S.A., beneficiaries' contributions have risen faster than the consumption expenditures, while, in Britain and Germany (F.R.), they have remained at about the same level. In higher educational institutions in U.S.S.R., no tuition fees are charged.

Figure 44 shows the changes in the index of recurrent expenditures based on changes in beneficiaries' contributions.

Figure 44. Index of Recurrent Expenditures in Higher Education with Beneficiaries' Contributions as the Base in Various Major Countries



Note: Actual numbers are given in Basic Table 85.

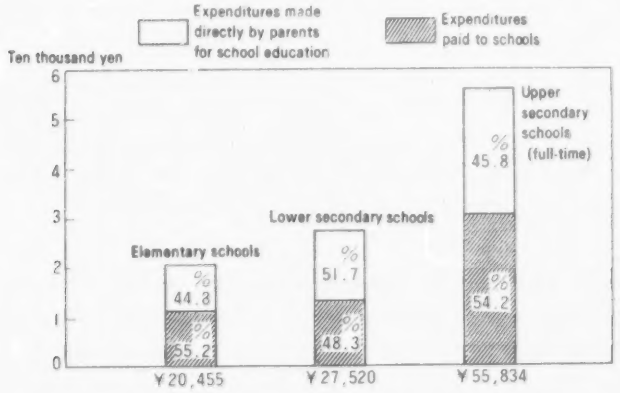
The figure shows that the indices have increased considerably in national and local public universities in Japan as well as in German universities (which are all national), while those in American universities have remained relatively constant in both public and private institutions. On the other hand, the index for private universities in Japan continues to remain at a relatively low level, while that for Britain is rising. The great discrepancy among national and local public institutions on the one hand, and private institutions on the other, is conspicuous from these indices of recurrent expenditures. In considering measures to be taken to eliminate such discrepancies, however, comprehensive consideration must be given to such matters as the distribution of family income and an appropriate system of scholarships adapted to such distribution, etc.

(5) Educational Expenditures Borne by Parents and Students

Educational expenditures borne by parents or students include two categories of expenditures. The first is expenditures paid or donated by parents or students to schools and expended through school revenue-accounts such as tuition fees, school meal fees, class fees, PTA membership fees, general donations, etc.; the second category is expenditures made directly by parents or students for school education, such as, expenses for purchasing text-books or school supplies, expenses for commuting to schools, etc.

Figure 45 shows the 1968 educational expenditures of parents of pupils in local public elementary, lower secondary and upper secondary schools, respectively.

Figure 45. Educational Expenditures Paid by Parents of Pupils in Local Public Elementary, Lower Secondary and Upper Secondary Schools, 1968



Note: Actual numbers for earlier years are given in Basic Table 86.

Table 90 shows the per capita increase in the annual educational expenditures of parents of pupils in local public elementary, lower secondary and upper secondary schools, using 1954–1956 expenditures as the base (amounts are converted into the 1968 value of yen). The indices in elementary and lower secondary schools have increased by one hundred per cent and those in upper secondary school, one hundred and fifty per cent. However, these indices of increase have all remained below that of the consumption expenditure per capita during the same period.

Table 90. Increase in School Education Expenditures per Pupil Paid by Parents in Local Public Elementary, Lower Secondary and Upper Secondary Schools

(Unit: yen)

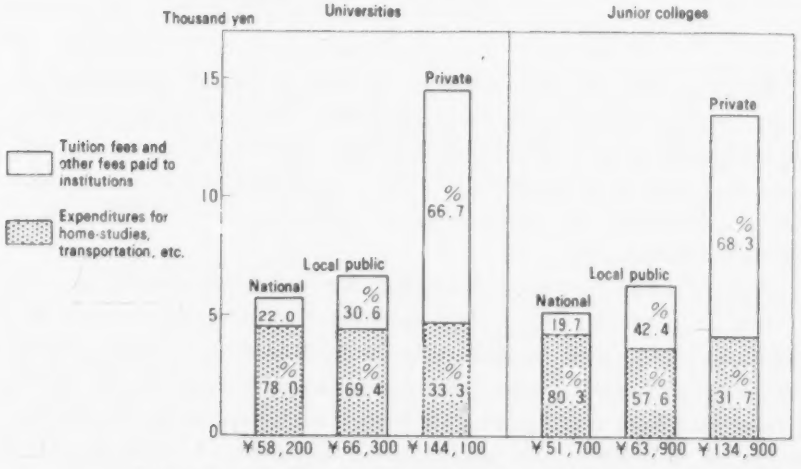
Year	Elementary		Lower secondary		Full-time upper secondary		Index of personal consumption expenditure per capita (1955=100)
	Real amount	Index	Real amount	Index	Real amount	Index	
1954 – 56 Average	10,463	100	13,413	100	40,024	100	100
1960	14,354	137	17,605	131	48,424	121	139
1965	17,866	171	23,031	172	50,960	127	201
1966	16,725	160	22,661	169	54,041	135	216
1967	18,450	176	24,691	184	53,992	135	235
1968	20,455	196	27,520	205	55,834	140	254

Note: Actual numbers are given in Basic Table 86.

The amounts in the table are shown in constant price of 1968 value converted by the consumer price index.

Next, student expenses for higher education in the year 1968, are shown in Figure 46.

Figure 46. Student Expenses in Universities and Junior Colleges by Establishing Body, 1968



Note: Actual numbers for earlier years are given in Basic Table 87.

It can be seen that tuition and other fees paid to institutions have been relatively low in national and local public universities and junior colleges but, in private universities and junior colleges, they have accounted for as much as two thirds of the total student expense.

When one observes the increase in the annual expense per student since 1955, one notes that the index has increased by fifty per cent in national universities, by thirty per cent in local public universities and by one hundred per cent in private universities. However, such rates of increase have all been lower than those of personal consumption expenditure per capita during the same period.

Table 91. Student Expense in Universities by Establishing Body

(Unit: yen)

Year	National		Local public		Private		Index of personal consumption expenditure per capita
	Amounts	Index	Amounts	Index	Amounts	Index	
1955	38,463	100	50,916	100	68,840	100	100
1961	47,422	123	55,205	108	92,785	135	150
1963	49,410	128	54,748	108	100,748	146	178
1965	50,016	130	52,445	103	115,405	168	201
1966	51,646	134	58,759	115	130,100	189	216
1968	58,200	151	66,300	130	144,100	209	254

Note: Actual numbers are given in Basic Table 87.
The amounts in the table are shown in constant price of 1968 value converted by the consumer price index.

In the preceding sections, we have examined educational expenditures in Japan, from various aspects. We have examined chronological changes and made comparisons with those in several major countries. Based on such analyses, we will note several problems in Japanese educational expenditures which should be solved and we will indicate some of the measures currently being taken by the national government in these areas.

1. National income, total public expenditures and educational expenditures

It is difficult or even impossible to generalize about the appropriate percent of national income a country should expend for education because this involves the entire set of government policies. It is noteworthy here, however, that the percent in Japan has tended to decline since 1955, while in the main foreign countries the percent has as a whole risen rapidly, leaving Japan with the lowest percentage expended among the leading countries in the world. Furthermore, the percent of

total public expenditures shared by education too, has shown as slight decline in Japan, in the face of a rise in the percents for other categories of public expenditures, such as expenditures for industry and commerce, for land developments, for public construction works, etc. In conclusion, it can be pointed out here that the weight of educational expenditure in Japan has shown a tendency to decline, both as a percent of national income and that of total government expenditure.

2. Distribution of educational expenditures

(1) In Japan, the largest percents of public education expenditures are occupied by school education expenditures with the weight of social education expenditure and of miscellaneous school expenditure being very small. It should be remembered, however, that educational activities should not be confined only to schools; they should be conducted in society in general and throughout life. From such a standpoint, the Social Education Council has recently published its opinions on life-long education. In the field of social education in Japan, there are important problems which now need further consideration, such as who should benefit from social education in the future; by whom should such expenditures be borne; and what percent of total education expenditure should be allotted to social education.

(2) The weight of higher education in the Japan's total school education expenditures is relatively small compared with those in the other leading countries in the world and the rate of increase in expenditures for higher education, too, has been relatively low in Japan. However, considering the fact that social demands for higher education will increase rapidly in the future, it is considered necessary to increase expenditures for higher education, and to eliminate the discrepancy in such expenditures between Japan and other countries.

3. Educational expenditure in private schools

When we take an overview of the educational expenditures in private schools in Japan, it can be seen that, at all education levels, expenditures per student are smaller than those in national and local public institutions and this gap between private institutions and national and local public institutions is increasing year by year.

The percent occupied by debt servies is larger for private institutions of higher education than any other major category, and the percent occupied by donations, loans and tuition fees, etc., is relatively higher than other sources.

Tuition and other fees in private institutions of higher education are conspicuously higher than those in national and local public institutions. However,

when comparing the indices of recurrent expenditures by institutions based on such fees, one notes a beneficiary index of as high as 18 for national and local public institutions, while, in private institutions, recurrent expenditures are almost identical to students' contributions. There are very wide discrepancies between private institutions and national and local public institutions, on this point.

Although there are many problems in Japan's educational finances as were pointed out above, it should be noted that at the same time, the national government has continued to make efforts to solve such problems, and has annually increased the national subsidies for education. It has also taken, at the same time, various measures for the improvement of local educational financing, such as the amendment of the Local Finance Act, and various measures for the assistance of private schools.

The first category of measures taken by the national government includes those aimed at lessening the burden to beneficiaries through the amendment of the Local Finance Act, etc. More specifically, a 1963 amendment to the Act prohibited beneficiaries from bearing the expenses for the salaries of teachers in municipal schools or expenses for the maintenance or repair of municipal elementary and lower secondary schools. In addition, there are other measures to lessen the beneficiaries' burdens, such as the full implementation of provisions of free text-books for pupils in compulsory schools, the increase of the national treasury's share of expenses for school supplies, the increase of national subsidies for expenses for school facilities and equipments, etc.

The second category involves measures for the assistance of private schools. In view of the importance of the role of private schools within the entire school education system in Japan, the national government has already made various efforts to promote education in private schools. Since 1970, it has not only increased the existing national subsidies but has also introduced a new system of subsidies for the recurrent expenditures of private institutions of higher education (universities, junior colleges and technical colleges), including teachers' salaries.

The Private School Promotion Foundation has been newly established, for the effective execution of such measures, replacing the former Private School Promotion Association. The new foundation is expected to be useful for the effective and comprehensive execution of national policies for the assistance of institutions of education in addition to allocating national subsidies to individual institutions and making loans to them.

CHAPTER V. EDUCATIONAL REFORM IN THE 1970's

In most countries the need for educational reforms is clearly realized and many of them are either undertaking reforms or are making plans to do so. Following the International Conference on the Educational Crisis held in the United States in 1968, in which the problem of the inadequacy of education in relation to social development was discussed, the United Nations declared 1970 as International Education Year, encouraging all nations to make efforts for the development of education. Implementation projects were proposed by UNESCO, and throughout the developed and developing countries enthusiasm for educational reforms has been growing.

In developed countries as the society becomes more industrialized and complex and the universities' problems became obvious, it has become clear that quantitative educational expansion alone is not a solution to social change. This has induced these countries to review past and present education and to examine the possibilities for reform. On the other hand in the developing countries recognition of the role of education in national development has grown, and from this viewpoint educational improvements are seen as essential to socio-economic development.

International cooperation is indispensable in promoting educational reforms able to overcome problems common to different countries. For the developing countries to promote educational development and to carry out educational reform it is especially important to secure educational assistance from developed countries and international organizations.

In this chapter an overview of educational reforms in developed countries and educational plans in developing countries will be introduced, followed by outlines of specific educational reform measures in a few major countries. Following this, the basic guidelines for educational reform reported by the Central Council for Education in Japan will be presented.

I. World Trends in Educational Reform

(1) The Task of Educational Reform in the Developed Countries

On the basis of the quantitative expansion of education in 1960's, the Organization for Economic Cooperation and Development, composed of twenty-two developed countries including Japan, held in June 1970 a "Conference on Policies for Educational Growth". High-ranking educational personnels from the member countries were invited to attend this conference. Those problems discussed in this conference as common to all member countries were as follows:

a. Educational Goals and Objectives

In the 1960's educational growth was regarded as being ultimately for economic growth. When economic growth had reached a high level, however, it became clear that it alone was not the final goal of human society.

The May 1970, Ministerial Council of OECD made it clear that the goal of the 1970's is to improve the quality of life through the remarkable economic developments of the 1960's, and the Conference on Policies for Educational Growth called for a growth in quality during the 1970's just as quantitative expansion had been made during the 1960's. It is also considered very important that educational growth be conceived in terms of the overall qualitative growth of the society. Thus there can be no educational goals apart from overall social goals, and without such goals there can be no specific policies or plans. Therefore the educational goals and objectives of the 1970's should be considered in relation to each nation's overall goals and objectives.

In thinking about education in the 1970's the concept of "recurrent education", i.e. education beyond formal school education, must be considered. The basic idea of recurrent education is that in a rapidly changing society it has become insufficient merely to attend school for a limited number of years, learning a specified amount of information; rather, it is essential to continue learning from childhood to the end of life.

In light of this, pre-school education, out-of-school education; and post-school education are all very important. School education should be conceived of as a single link in a life-time of education.

(a) Equality of opportunity

When public education was available to only a limited number of people the

great objective was to expand the opportunities to receive public education. Now, however, at least in terms of elementary and secondary education, almost the entire population in most major nations has access to public education. In this sense the objective of expanding public education has been achieved. In terms of higher education too, as a percent of the total age group, those receiving higher education has grown tremendously during the 1960's and this will probably increase, but at present there seems to be a general balance between social demand and opportunity.

Equality of access to public education does not necessarily mean equality in benefit from public education. This raises the question of providing equality of achievement, meaning that the problem is no longer one of quantity but one of quality. The present task is to secure true educational equality by creating opportunities for each individual to obtain equal achievement.

(b) Effectiveness

In order to achieve the goals of education, educational effectiveness must be a major objective. When economic growth was being emphasized, training manpower as rapidly as possible was considered an educational objective by some people. But just as quality of growth is seen as more important in the 1970's, so effectiveness of education must also be reemphasized.

The most important factor in improving the effectiveness of education is the teacher. Training high quality teachers and improving their status is imperative if effectiveness is to be improved, and this is a primary task for all countries in carrying out educational reform.

(c) Socialization

Education acts as a bridge between the individual and society. Rapid economic growth, technological advances and social change have, during the last three decades, entirely transformed the relationship between the individual and society, and changed the social framework for the individual as well. Therefore it is necessary to reform curriculums, teaching methods and the relationship between school and society so as to provide an education stressing subjectivity and autonomy while enabling youth to adapt to society.

Whether an individual can play a constructive role in the society of the future depends on his self-consciousness and educational achievement much more than was true in the past. In other words carrying out the socializing role of education to a great extent means carrying out a process of individualization.

(d) Individual development

The objectives pointed out above are all related to the central problem of individual development. One of the most important problems of contemporary education is educating individuals to fit in with the new era. Educational structure, curriculum, and teaching methods should all focus on the education of creative individuals within this new pattern.

b. More Effective Allocation of Educational Resources

Once the goals and purposes of education have been made clear, effective allocation of resources must be considered. Available resources, including human resources, are limited, and so in approaching national goals or objectives the most effective allocation of these limited resources is one of the most major practical problems.

Two phases of this problem in the field of education can be pointed out. One is the proportion of resources that the field of education should share within the total plan for social development. The other is determining resource allocation priorities within the field of education.

On the allocation of resources within the field of education the following three points should be taken into account.

(a) Adequate allocation of educational resources in accordance with educational objectives

It is necessary to make educational objectives clear in light of what the society expects from education, and then to determine the priority of these objectives. For this purpose it is necessary to develop an indicator adequate to measure educational output. It is also necessary to prepare objective materials concerning the unit cost of various educational activities, etc.

(b) New ways of combining resources to achieve more effective teaching-learning processes

Educational technology has recently begun to attract a great deal of interest. In order to relate this to existing teaching-learning processes large scale research and development aimed at the overall improvement of the educational system is necessary.

(c) More efficient ways of using existing technological resources

Since 1965 the United States' government has employed management systems such as PPBS in formulating its budget. In the United Kingdom and other countries similar systems have been studied, and the introduction and development of scientific management has been undertaken. In a field such as education, which is

highly intellectual and creative, the development of administrative techniques is necessary and further research on this is required.

c. Review of Educational Structure

Once the goals and objectives have been made clear, "educational structure" must be considered along with actual resource allocations.

In this context "educational structure" involves school systems, curriculum, teaching methods etc., and solutions to difficulties in these areas should be attempted in accordance with previously determined goals and objectives. It is natural that each nation will have its own demands for specific changes in educational structure; however, now is the time for all countries to recognize that a review of educational structure is a problem common to all.

(2) Educational Planning in the Developing Countries

Educational reform trends in the developed countries were reviewed above, but many of the countries which became independent after World War II have made great efforts in promoting economic and social development so as to acquire independence and prosperity. The United Nations, UNESCO and other international organizations have extended economic and technological assistance to these countries, and multilateral or bilateral projects of cooperation have also been carried out. These attempts were made with the understanding that closing the gap between the developed countries and the developing countries is a fundamental requirement for the peace and prosperity of the world.

But achievements in the twenty-five years since the end of the war have not necessarily been satisfactory and the gap seems even to have increased. There are many reasons for this, but it is obvious that one of the main problems is that the development of the human resources which are indispensable for socio-economic development has been slow in the developing countries and it will take a long time to see the results of efforts in this area.

As a first step in overcoming these difficulties in educational development UNESCO initiated an Asian regional plan called the Karachi Plan in 1960, an African regional plan called the Addis Ababa Plan in 1961 and a South American regional plan called the Santiago Plan in 1962. In 1965 a World Conference of Ministers of Education was held in Iran under the sponsorship of UNESCO and practical measures for the eradication of illiteracy were discussed.

As a follow-up to the Asian region's Karachi Plan, the First and Second Conferences of Ministers of Education were held in 1962 and 1965, respectively,

under the sponsorship of UNESCO. There, the popularization and development of elementary and secondary education was discussed. Furthermore in 1968 an International Conference on Educational Planning was held in Paris to review educational planning as an integrated aspect of socio-economic planning.

Today it is well recognized that educational development is the foundation of all economic and social development, and many developing countries are attempting to create national educational plans from international viewpoints.

2. Trends in Educational Reform in Various Major Countries of the World

In this section a glance will be given at the trends in educational reform in various major countries.

(1) U.S.A.

In the United States, education is in principle under the jurisdiction of each state, and at the level of the Federal Government only the Office of Education has been in a position to undertake activities in educational research and statistics. However, changes in recent years have required an increased involvement by the Federal Government in education. As a result, the education budget of the Federal Government expanded ten times during the 1960's, most of which was used to support state or local governmental agencies and institutions for higher education. This can be interpreted as an increased role by the Federal Government in education.

According to the principle of self-government, the fifty States and more than 25,000 local school districts are responsible for any reforms in educational structure, content or method at the elementary and secondary levels. The most important problem at present is deemed to be adjusting the educational gaps between different regions and different social groups. In sum, developing the abilities of all individuals to the fullest extent is at present the task common to all levels, and various attempts at innovation referred to in Chapters One to Four are being made in this light.

In terms of higher education, as the number of people enrolled has increased, discussions have centered on just what institutions of higher education should be. The role and function of graduate schools and junior colleges, particularly

community colleges, is at the center of discussion. A number of States have developed educational plans for higher education. In 1960, a Master Plan for Higher Education in California was created to reorganize all state institutions for higher education. In New York State, a Regents Statewide Plan for the Expansion and Development of Higher Education was formed in 1964. Some other states have followed these two. Reorganization of education and reconsideration of administration in higher educational institutions in those institutions where inadequacies were revealed during campus conflicts are also being made.

(2) England and Wales

In England and Wales where the society is extremely traditional, changes in the field of education are also notable

In terms of elementary education the expansion of nursery schools in poorer areas of big cities and reform of the school system to meet different stages in the development of children are in progress, based on the recommendations of the Plowden Report.

At the level of secondary education such reforms as the elimination of the eleven-plus examination and the organization of comprehensive schools have been made. Curriculum reform and changes in the university entrance examination system are also under consideration.

At the level of higher education in Britain, programs for expansion have been carried out according to the lines of the Robbins Report. The transformation of colleges of advanced technology into technological universities, the establishment of a Council for National Academic Awards to offer degrees to those who finish advanced courses in continuing education, and the shifting of the University Grants Committee into the Department of Education and Science were implemented. New Universities were opened from 1961 to 1965 and the Open University is to be opened in January, 1971. Both differ from the traditional universities in the use of television and radio, in curriculum and in the organization of education and research.

(3) France

In France social frustration with an educational system based on the traditions of the 19th century induced movements toward reform. At the level of secondary education such efforts as the creating of courses called "observation cycles" and serial revisions of curriculums were made to bring education up to date and to

emphasize individual development. The reform of university entrance examinations was attempted with the intention of increasing the opportunities for higher education.

A Fundamental Law of Higher Education was issued on November 12, 1968 as a consequence of campus tensions in May and June, 1968, by which student participation in the administration of higher educational institutions was recognized. In terms of educational contents the law also eliminated the traditional chair system and set up a pluridisciplinary system for integrated studies. Thus education was reformed to cope with contemporary social demands. Attempts are also being made to open universities for reeducation and in-service training for those who have already started their careers.

(4) Federal Republic of Germany

In the Federal Republic of Germany there has not traditionally been a national educational policy. In October, 1969, however, a Ministry of Education and Science was established in the Federal Government and future educational policies are now under consideration. For instance, a new division of school levels has been suggested to make elementary education four years, lower secondary education six years and upper secondary education three years.

At present in some states exploratory attempts are being made to give more emphasis to the abilities and aptitudes of individuals by establishing comprehensive schools beyond the existing three varieties of secondary school (secondary schools for general education, trade or technical schools, high schools). This device also aims at offering more opportunities to pupils from lower class families.

In terms of higher education there are plans to transform upper vocational schools into technical colleges in 1972. A few of these colleges and exisiting universities within the same region will form a universities union, by which it is expected that university administration will be able to operate more effectively.

(5) U.S.S.R.

In the U.S.S.R. also, reforms in educational structure, content and method are being urged for the 1970's. In 1970 a plan to extend compulsory education to ten years was started, and efforts are being made to accomplish this objective. The division between elementary education and secondary education is also to be amended in this year. The division previously had been 4 years elementary education, 4 years lower secondary education and 2 years upper secondary

education. This will be reformed into 3 years elementary education, 5 years lower secondary education and 2 years upper secondary education.

In terms of educational content and method there has been a tendency toward uniformity but recently elective subjects were introduced for pupils above the seventh grade, and special schools for especially talented pupils in the fields of mathematics, physics, chemistry and foreign languages were established. More emphasis is now put on education to develop individual abilities and to meet individual aptitudes. Efforts are also being made to improve and advance the comprehensive technical education which has been the basic element in education since the revolution.

Moreover, since 1950, nursery school-kindergartens which begin education two months after birth have been established. In addition, at all levels night schools and correspondence education have been greatly expanded, thereby opening education to working youths and adults.

3. Educational Reform in Japan

(1) Deliberation in the Central Council for Education

The Central Council for Education was asked by the Minister of Education in July, 1967, to consider "fundamental policies and measures for the future expansion and development of school education". The Council submitted an interim report, containing an evaluation of the development of Japanese education in June 1970. On the basis of this and opinions heard from various sectors in society, the Council made an interim report called "The Basic Guidelines for the Reform of Higher Education", in May 1969 and an interim report called "The Basic Guidelines for the Reform of Elementary and Secondary Education", in November 1970. A final report is expected to be submitted in the spring of 1971.

The outlines of the two reports are as follows.

(2) The Basic Guidelines for the Reform of Elementary and Secondary Education

1. Developing a School System Adapted to the Different Stages of Human Growth

In order to study measures for resolving the problems pointed out in the current school system and to implement gradual educational reform, experimental pilot projects must first be carried out with the following aims.

(1) To improve the effectiveness of education throughout childhood by giving children from 4–5 years old through the lower grades of elementary school a consistent education in one institution.

(2) To create a consistent secondary education in order to solve the problems caused by the current division into lower and upper schools, and with educational guidance, to provide effective diversified education to meet various aptitudes and interests of the students, according to their ability.

(3) To increase the effectiveness of education at each school level by changing the divisions between elementary and lower secondary schools, and lower and upper secondary schools.

(4) To extend to other types of educational establishments the idea of the educational program offered at present in the technical colleges, i.e. a consistent set of courses covering both secondary education and the first stage of higher education.

2. Reforming the Curricula in Accordance with the Characteristics of Each School Level

The curricula offered at each school level should be consistent and should aim at giving pupils basic educational skills needed as Japanese citizens as well as developing their individual, creative personalities. At the beginning, emphasis should be placed on certain standardized, fundamental, well-chosen essentials and the school system after that should allow individuals to choose those courses best suited to their particular abilities and interests. From this viewpoint the following points need further examination:

(1) Promotion of consistency in the curricula offered from the elementary school to the upper secondary school, careful selection of curricula contents, and further examination of the classification of subjects taught, especially so as to improve basic elementary school education.

(2) Diversification of the curricula of upper secondary schools to enable students to choose courses suited to their particular abilities and interests. In this context, while courses are diversified, it should also be made easier for individual students to transfer from one course to another according to their abilities and changes of interests. The system should also be structured so that students may advance to schools of a higher grade from various courses.

3. Improvement of Students' Guidance Regarding Selection of Courses

The difficult but important task of education is to guide students to select properly suitable courses at each level of education, aiming toward the realization of an individual's potential and individual traits as objectively as possible. To do

this effectively, however, education requires the understanding and cooperation of individual families and society in general.

4. **Improving Educational Techniques in Order to Develop Students' Individual Abilities and Interests**

The success of education depends not on what is superficially studied but on what is actually learned. In this learning process, teaching skills and techniques are as important as the content and level of education offered.

It is very important, therefore to make the best use of teaching techniques which can be adapted to individual abilities and interests at each school level in order to ensure the attainment of our educational objectives. To this end all proper measures should be studied further, with particular attention being paid to the following:

(1) Creating flexible class management by employing techniques such as instruction by grouping, etc. in order to provide effective education which will both conform to educational objectives and prove suitable for individual pupils'.

(2) Creating opportunities for individual study so that students can pursue their studies in a rational manner and in a fashion suited to their own characteristics.

(3) Establishing a flexible system within which simultaneous guidance may be given to students of different grades as this may be more effective than giving guidance to students of one grade at a time.

(4) Allowing the exceptional step of early advancement to higher education for certain mature students in the senior grades.

5. **Maintaining and Improving the Standard of Public Education and Equality of Educational Opportunity**

The government should reform the administrative and financial arrangements which regulate education in order to ensure equality of educational opportunity with attention, in particular, to the following:

(1) Maintaining curriculum criteria and other educational standards at an adequate level, and improving them by continuous re-examination in response to social development.

(2) Preserving the public nature of private schools since they play an important role in public education, and improving their educational conditions to relieve students from the financial burdens of studying there.

(3) Making the conditions of study for young people already at work more flexible, to keep up with the diversification of employment opportunities.

6. The Positive Expansion and Development of Kindergarten Education

In view of the importance of education for small children and the popular demand for kindergarten education, the government should actively promote the following measures to improve kindergarten education:

(1) To increase the number of kindergartens and to have as the primary objective that all 5 years old children who so wish may be enrolled in them, making it the obligation of municipal authorities to establish kindergartens with sufficient capacity. An increase in financial aid from the national and prefectural governments for their establishment will be necessary for this.

(2) Together with the measures explained in (1), to coordinate kindergartens geographically so that both public and private kindergartens can adequately play their respective roles and at the same time to take necessary financial measures in order to enrich the quality of education and to decrease the financial burdens of kindergarten enrollment.

(3) To improve kindergarten curricula on the basis of research on pre-primary education.

(4) To change over from individually-operated kindergartens to incorporated kindergartens in as short a period as possible.

7. Positive Expansion and Improvement of Special Education

It is an important responsibility of the government to guarantee the equality of educational opportunity to all the people according to their ability. There are mentally and physically handicapped people unsuited for study in ordinary schools and for learning through standard teaching methods. To secure special education for these people the government should take administrative and financial actions as soon as possible to implement the measures described below.

(1) To realize compulsory education in the special schools for the handicapped which has thus far been delayed, and to charge the cities, towns or villages with the responsibility of establishing special classes able to accommodate all mentally retarded children

(2) To diversify the forms of education so as to meet various needs of mentally or physically handicapped children, including sending teachers to those children unable to attend school because of medical treatment, etc.

(3) To play a more active role in the improvement of the facilities of special education by establishing institutes for children with dual handicaps of a serious nature, etc.

(4) To improve the treatment of mentally or physically handicapped children by

means of earlier discovery and training, improvement of education beyond compulsory education, promotion of closer cooperation between special education policies and policies concerning medical affairs, protection and social independence, etc.

8. Improvement of the Structure of Management within Schools and the Administrative Structure of Education

In order to establish a structure within which each school can perform integrated activities in the pursuit of its public education objectives and can hold itself responsible to the people, appropriate measures for reforms should be considered with emphasis on the following:

(1) Establishing an administrative organization within schools in which the duties of school activities are properly divided, thus ensuring a lively and well-organized school program in every school under the guidance and responsibility of the school principal.

(2) Taking steps to create a system of unified local administration in charge of public and private schools.

(3) Devising means for hearing public criticism and demands concerning government activities in education and to reflect these directly in improved administrative policies.

9. The Training and Recruitment of Teachers and the Improvement of Their Status

The following measures should be enforced comprehensively to secure the best possible teachers for the educational system, and to improve the quality of their educational activities as well as their social and economic status, since they will play increasingly important roles in the future.

(1) In principle, the teachers of elementary education and a certain percent of the teachers in secondary education should be trained in institutions of higher education with special curricula for that purpose (hereafter called 'teachers colleges'). On the other hand distinguished teachers should be secured by inducing the graduates of ordinary universities with certain qualifications into the teaching profession. In doing so, measures should be taken to adjust the demand and supply of teachers over different areas throughout the country.

(2) In addition to improving teachers colleges as explained above, the government should take appropriate programatic steps to train teachers and to expand the financial aid system for students in order to secure the necessary teachers for compulsory schools.

(3) It is necessary to consider the possibility of establishing a system of recruitment in which the potential teachers would be trained for about one year in special programs geared foward real teaching situations. These would be established by future employers who would then employ the trainees according to their performance. This will guarantee improvement in the in-service training of new teachers. By doing so it is expected that teachers will have more self-consciousness and a higher level of practical teaching ability.

(4) The system of licencing talented individuals who, although they may have no proper teaching certificates, are sufficiently erudite and experienced must be extended in order to invite them to teach in schools.

(5) Means must be found to establish institutions of higher education designed for advanced educational research and for teacher training and to start a system to give teachers graduating from such institutions with highly specialized qualifications, a special status and a salary in accord with that status.

(6) As to teachers' pay, improvement must be made to keep teachers' salaries at a level high enough to attract distinguished persons into the teaching profession, and at the same time to create salary scales which will ensure teachers of suitably increased salaries as their abilities become greater and their administrative responsibilities are extended.

In addition, since the people put a high value on education and expect much from the teachers, it is desirable that teachers form their own professional organizations and make efforts to improve their quality through a mutual exchange of experiences so that they may earn the respect and trust of society with the recognition that the teaching profession is a specialized one with highly developed skills and a firm professional ethic. If the teachers will make efforts to improve their quality continuously by means of such training, their constructive opinions will be socially accepted and they will meet the people's expectations of them.

10. The Promotion of Research in Educational Reform

In view of the present rapid pace of change and the pressing need to improve the quality of education, a center must be set up to carry out integrated and intensive research into educational affairs so as to promote the reforms stated above concerning the elevation of professional standards of teaching and the development of practical educational methods.

(3) The Basic Guidelines for the Reform of Higher Education

1. The Diversification of Higher Education

In order to diversity Japanese higher education in the future, institutions for higher education must be categorized according to students' qualifications and the number of years required for the completion of an average course of studies. At the same time it is desirable to provide different types of curricula in accordance with the aims and nature of the education. It is also necessary to establish a system where students can easily transfer at will, from one category of institution or one type of curriculum to another.

(1) Category I (Provisionally to be called "University")

This category would include institutions of higher education providing three or four years of education for graduates from upper secondary schools.

The following types of curricula are to be offered by institutions within this category:

(A) Comprehensive curriculum, providing professional knowledge and skills for those careers which are not particularly specialized.

(B) Academic curriculum, developed in accordance with the academic system of each discipline, systematically providing basic academic knowledge and skills.

(C) Occupational curriculum, providing the theoretical and technical training required for particular professional occupations so as to provide students with the qualifications or abilities for those occupations.

(2) Category II (Provisionally to be called "Junior College")

Institutions within this category will offer shorter curricula, in principle, two years of education, to graduates from upper secondary schools. The following types of curricula are to be offered within this category:

(A) Comprehensive curriculum, aimed at giving students whose future careers will not be too specialized, the necessary cultural background to be good citizens in the society.

(B) Occupational curriculum, providing knowledge and skills required by particular professional occupations to provide students with the qualifications and abilities for these occupations.

(3) Category III (Provisionally to be called "Technical College")

Institutions in this category are to provide higher education over five concurrent years for those who have finished lower secondary education, enabling students to acquire the qualifications or abilities necessary for particular professional occupations or for other specific purposes.

(4) Category IV (Provisionally to be called "Graduate School")

Institutions in this category are to provide an advanced academic education of two or three years' duration in specific fields, either for those who have graduated from institutions within Category I or for those who are recognized to have ability equivalent to or higher than the former. They are also to provide re-education at this advanced level for people in general.

(5) Category V (Provisionally to be called "Research Center")

Institutions in this category are to provide opportunities for research and training, and research guidance for those who want to pursue an advanced level of academic research worthy of a doctor's degree.

2. Directions of Curriculum Reform

Curricula in institutions for higher education in Categories I and II (universities and junior colleges) should be developed along lines allowing for the provision of comprehensive or more specialized forms of education. The goals of general education pursued by existing universities would be more effectively approximated if the following improvements are made:

(1) General education has, in the past, sought to give students overall knowledge of various disciplines, an understanding of scientific method, a grasp of problems in the context of cultural development and a correct understanding of humanity and values. All these aims should be included in and pursued integrally with every revised program of study.

(2) Whatever fundamentals are required in specialized education should be integrated into the specialized education programs of the respective institutions.

(3) Foreign language training should aim at giving students a knowledge of foreign languages for practical international use. As the occasion demands, language training centers set up on campuses may be assigned this responsibility and the results tested. (The education of those majoring in foreign languages or foreign literature will be considered on a different basis).

(4) Health and physical education should be improved by giving adequate guidance in extra-curricular athletic activities and by supervising the health of all students more thoroughly.

3. Improving Teaching Methods

It is desirable to effect an improvement in the teaching methods used in institutions of higher education in accordance with their teaching patterns, i.e.:

(1) In the teaching of systematic theories, the quality and efficiency level of lectures can be raised by widely utilizing broadcasting VTR (video-tape recorders)

and other technological devices.

(2) Seminars, experiments and practice sessions of small groups should be developed further in order to help students understand perfectly and to obtain the ability to apply what they have learned in lectures.

(3) As regards athletic and cultural activities on the campus, specialists should be appointed in designated training centers thus allowing students to enjoy student life thoroughly by giving them guidance and assistance.

4. The Necessity of Making Higher Education Open to the General Public and of Establishing a System of Certification

To allow all people in our future rapidly changing society to receive education at any time and whenever necessary, higher education should be made available not only to students in specific age groups or with particular educational qualifications but also to the public at large. This means that it should be made easy for all institutions of higher education to accept those requiring re-education and also that educational opportunity should be expanded by using methods other than those of the traditional credit system of school education. It should also be made possible for these acquiring a certain number of approved credits from various categories of institutions to be granted higher education certificates.

As regards existing bachelor's, master's and doctor's degrees, it is necessary to consider the elimination or the simplification of the exsisting classifications within each degree.

5. The Organizational Separation of Teaching and Research

In order to achieve a balance between the teaching and research activities of the faculty in institutions of higher education, the structure of the teaching body should be reformed into one carrying out education for students. At the same time, all teachers should be provided with an environment conductive to research, in accordance with the aims and characteristics of the institutions. For this purpose, in institutions of Categories IV and V (graduate schools and research centers), it is desirable to separate the teaching and research organizations and to develop each of them in a rational fashion. It is necessary to clarify teachers' responsibilities for each area, and thus to establish co-operation between teaching and research organizations having independent aims and objectives.

6. Institutions of Category V (Provisionally to be Called "Research Centers")

The "Research Center" is a teaching and administrative organization giving research training to those wanting to engage in advanced academic research programs leading to a doctor's degree. As a rule, it will have a faculty with some

full-time teachers of its own. Therefore, if it is to be established in affiliation with other institutions, institutions of Category IV (graduate schools) or research institutes where an appropriate research and training organization now exists should be chosen. Of those admitted to engage in research, those chosen as assistants for the teaching and research activities of the center or other institutions should be given appropriate remuneration. In relation to the establishment of these research centers, it will be necessary to examine the research institutes now attached to institutions of higher education, research institutes designed to be used jointly and other academic research institutes.

7. Size of Institutions of Higher Education and Rationalization of Administrative and Managerial Organization

Institutions of higher education should avoid becoming too large simply as a means of meeting managerial needs or to become self-sufficient research institutions. They should be of such a size as to allow optimal coherent functioning as an educational institution. For the benefit of research, exchanges between institutions of higher education and research institutes should be encouraged by developing close relationships and co-operation between them.

The administration and management of institutions of higher education should avoid allowing internal organizations to exert sectional pressures. Integrated and efficient teaching and research should be protected from various external and internal influences. Also necessary is a structure in which administrative operation can take place without interference in the institutions' initiative and self-government. Regarding matters affecting the entire campus, such as administrative, financial and personnel problems and students affairs, more emphasis should be given to the planning, co-ordinating and evaluative activities of the central administrative organ, as headed by the president and vice-president. It is also necessary to secure the appropriate participation of learned persons outside the institutions and, on relevant problems, student opinion should be heard in order to further improve administration and management.

8. Improving the Employment of Teachers

Institutions of higher education should secure an adequate number of teaching staff well-qualified for the purpose and nature of the institution and suitable for a position in either teaching or research. At the same time institutions of higher education should improve their administration regarding teaching staff. They should, that is, prevent that stagnation in teaching and research which results from insularity; they should obtain the participation of experts from outside the

institution in the selection and evaluation of the performance of the teaching staff; they should limit the time that one teacher can remain in one particular position; they should also limit the number of teachers graduating from any one university.

At the same time, teachers salaries and other conditions of employment must be extensively improved in order for institutions of higher education to attract a highly qualified staff and to make it easier to exchange personnel with circles outside the institution. The improvement in the salary level should also include devices to encourage teachers to make greater efforts for education.

9. The Direction to be Taken for the Reform of Establishment Procedures for National and Public Universities

Among insitutions of higher education, national and public universities in particular within the present system, considered to have the character of administrative governmental agencies in the broad sense and at the same time need special arrangements for their governance. They, therefore, are in a position where it is easy to have conflicts with the controling authorities of the national or local government that has established the institution. Furthermore because of the way in which they were founded, such universities have a tendency to rely on institutional stability and to loose their sense of autonomy and responsibility for university governance. Therefore the following two ways of reform can be envisaged to clarify their relationship with the founders and to allow them to govern themselves with real autonomy and responsibility. In doing so it is hoped that each university will be reformed in accordance with the university's purpose and character.

(1) The present form of establishment should be abandoned and universities should be incorporated in a new form allowing them to manage themselves autonomously with a certain amount of public funds and yet with some responsible public character.

(2) The universities must improve their administration, establish responsible management and clarify their relationship with their founders.

10. Improving Governmental Financing of Higher Education, the System of the Costs Borne by the Beneficiares and the Scholarships System

To develop higher education further, and to maintain and raise the quality of higher education, it would be desirable for the government to give qualified private institutions for higher education a subsidy amounting to a certain proportion of their expenditure reasonably estimated and fixed in terms of the institutions' objectives and the nature of their activities. In doing so the government should have a long-range educational plan, and the institutions should be permitted to use the

subsidy flexibly and effectively. The application of this formula to the provision of financial resources for national and public institutions of higher education should also be considered. In this case, however, it should be noticed that the sum including tuition fees borne by the beneficiaries should be made more appropriate, so that any great differences in the finances available will not result from differences between founders or from differences between areas of specialization.

When the government's measures for dealing with the above problems are discussed, a thorough examination should also be made of the national scholarship system, with the intention of furthering equality of educational opportunity and of encouraging talented individuals to enter those areas where they are most needed.

Furthermore, taking into account the social role of institutions of higher education it would be desirable for not only the government but also the society in general to give a considerable degree of financial support to them.

11. A National Plan for Co-ordination of Higher Educational Improvements

National financial aid is indispensable to better establishment and governance of institutions of higher education in the future. Therefore, in order to utilize its resources to the fullest, the government must develop a long-range plan for the size of higher education as a whole, classifying the types of higher education in relation to the various purposes and characteristics of institutions, proportioning the enrolments ... each specialized field and ensuring a fair, regional distribution of institutions. It is, therefore, necessary to develop such a plan now for the nation as a whole, to establish a new public framework responsible for its realization, and to reform and enrich higher education in general.

12. Improving Students' Environment

In order to make education in the institutions of higher education fruitful in the best sense of the word, in addition to the above-mentioned reforms an enriched student life should be secured by improving extra-curricular activities and students' environment. We must help students to develop their characters to the fullest extent. In character formation the "dormitory" has been found to be very important, and it is important for institutions of higher education to improve the dormitories further. Since both now and at a later stage some institutions may be unable to provide "dormitories", other ways must be found to offer the educational advantages of a "group-life" that the domitories have offered. In addition, some other methods must be found by which the great numbers of students who are studying may be given the chance to have personal communication with others, and the environment must be improved to provide them with

adequate food and accommodations. If the institutions of higher education cannot accomplish this alone, then the government must consider some appropriate measures.

13. Improving the Selection Procedure for Students

Because the student selection system affects all education in Japan, we must try, from now on, to improve that system. The aim should be that in the selection of students for higher education, the records of those who, at the secondary level, studied the planned curriculum conscientiously, should be fairly evaluated and that each student should be able to gain admittance into a university suited to his individual abilities without special preparation for entrance exams. The improvement of the selection procedure must be based on the following principles:

(1) School records, fairly showing what students have accomplished in senior high school, should be used as one element in selection.

(2) A common test with a broad range should be developed and used as a means to adjust the different standards of evaluation among high schools.

(3) When a university wants, it may initiate a test to examine certain abilities needed for a specific field or require essays and/or personal interviews. The results of all these should be used in making a comprehensive judgment.

CONCLUSION

In Chapters One to Four an objective observation of educational trends in Japan was attempted, and on the basis of international comparison of various elements the standards of education in Japan were made clear.

It has become evident that the quantitative development of education in Japan is remarkable when it is compared with education in other major countries. At the same time it can also be pointed out that there are still many problems to be solved in the future. These problems include innovation in educational contents and methods to meet the needs of individual development and individual apptitude, closing the gaps in educational conditions in school from one region to another and between public and private schools, and correcting the decrease in educational expenditures as percents of national income and public expenditures. At the same time the educational structure and organization throughout society should be reviewed with a view toward life-long education.

As seen in Chapter Five both in the developed countries where quantitative educational expansion has been achieved and in the developing countries where efforts are being made to expand education as the basis for socio-economic development, educational innovations and educational planning are being positively undertaken in accordance with the specific circumstances in each country. The Central Council for Education in Japan, aware of world trends in education, has made various reports suggesting basic guidelines for educational reforms.

Having that in mind, the following conclusions can be made:

First, the qualitative improvement of education is important. In order to meet the demands on education both of individuals and the nation or society, it is necessary to improve educational methods and contents at all levels of education, and to consider the diversification of upper secondary education and the role and function of higher educational institutions.

Second, in order to accomplish this, research on, and the development of, education should be made continuously and with serious concern for priorities.

Third, what resources should be allocated to education for the improvement and development of the society as a whole, and with what priorities within the field of education these resources should be allocated must be studied.

Fourth, a framework for life-long education, which means education throughout life within families, schools and society, should be established.

Finally, it can be deemed as one of the most important tasks of Japan to give positive educational assistance to the developing countries based on Japan's experiences, as we can see that international relations will become closer and the need for international cooperation in the field of education will grow greater.

APPENDICES

A. Basic Tables

B. List of Sources

APPENDIX A. BASIC TABLES

Chapter 1. Expansion of Educational Opportunities

Basic Table 1. Trends in Enrolment Ratios of Kindergartens and Nursery Schools (Figure 2)

Year	First Year Enrolment in Elementary School	Kindergartens		Nursery Schools		Children Enrolled in Kindergartens and Nursery Schools as a percent of the Total First Year Enrolment in Elementary Schools
		Number of Children Enrolled	Enrolment Ratio	Number of Children Enrolled	Enrolment Ratio	
			%		%	%
1959	1,874,453	501,689	26.8	–	–	–
1961	1,688,107	525,710	31.1	–	–	–
1963	1,576,861	574,024	36.4	–	–	–
1964	1,534,146	596,180	38.9	347,454	22.7	61.6
1965	1,612,844	666,658	41.3	366,905	22.8	64.1
1966	1,568,223	693,900	44.3	370,665	23.8	68.1
1967	1,551,803	731,843	47.2	–	–	–
1968	1,566,817	773,760	49.4	–	–	–
1969	1,593,870	825,437	51.8	532,427	33.4	85.2

Note: The number of children enrolled in nursery schools shows the number of five-years children who had been enrolled in nursery schools for not less than six months.

Basic Table 2. First Year Enrolment in Elementary Schools and Number of Children Enrolled in Kindergartens by Prefecture (1969), (Figure 3)

Prefecture	First Year Enrolment of Elementary Schools	Number of Children Enrolled in Public Kindergartens	Number of Children Enrolled in Private Kindergartens
Total	1,593,870	262,828	562,609
Hokkaido	87,150	1,358	28,765
Aomori	26,189	532	5,408
Iwate	23,828	1,412	5,063
Miyagi	28,394	1,619	11,923
Akita	20,190	2,021	4,776
Yamagata	19,154	765	5,951
Fukushima	33,881	6,492	9,721
Ibaraki	33,558	6,993	6,603
Tochigi	24,154	388	11,212
Gunma	24,820	6,014	6,030
Saitama	60,803	3,106	36,648
Chiba	51,748	6,699	19,604
Tokyo	155,513	10,431	88,667
Kanagawa	80,403	2,689	52,676
Niigata	36,773	2,525	5,418
Toyama	14,826	2,323	2,519
Ishikawa	15,054	1,206	3,578
Fukui	11,772	4,808	2,392
Yamanashi	12,301	215	3,410
Nagano	29,646	508	4,260
Gifu	28,000	3,428	6,214
Shizuoka	48,168	13,733	19,125
Aichi	84,314	5,803	28,112
Mie	23,961	11,121	2,449
Shiga	13,207	6,088	960
Kyoto	31,107	6,000	13,307
Osaka	117,923	36,399	51,238
Hyogo	69,958	36,899	20,896
Nara	13,353	6,210	1,690
Wakayama	16,088	4,914	4,803
Tottori	8,669	159	1,608
Shimane	11,593	5,554	648
Okayama	24,329	15,034	2,029
Hiroshima	34,941	6,010	11,486
Yamaguchi	22,265	2,819	8,117
Tokushima	11,792	8,895	437
Kagawa	12,627	7,842	2,809
Ehime	21,968	2,540	6,382
Kochi	11,320	362	1,243
Fukuoka	60,755	2,897	28,425
Saga	14,033	556	5,154
Nagasaki	28,798	3,640	7,317
Kumamoto	28,117	3,531	5,113
Oita	17,789	8,395	3,215
Miyazaki	18,122	758	6,457
Kagoshima	30,316	1,137	8,251

Basic Table 3. Demand for and Provision of Institutions of Pre-School Education (Figure 4–5)

Number of Facilities / Type of Facilities Demanded	Kindergarten			Nursery School	Number of Parents Who did not Send Their Children to either Kindergarten or Nursery School	No Answer	Total
	Public	Private	No Answer				
Total	2,229	4,080	13	3,940	1,111	145	11,518
Kindergarten	1,673	3,062	12	737	433	49	5,966
Nursery School	92	94	0	1,373	153	27	1,739
Kindergarten or Nursery School	436	870	0	1,773	402	35	3,516
No Demand	14	30	0	16	67	0	127
Uncertain	6	7	0	16	38	3	70
No Answer	8	17	1	25	18	31	100

Note: This table shows the relationship between the types of pre-school facilities desired by parents who had first grade children in 1970 for their children at the age of five and those to which they actually sent their children at that age. (Sample Survey)

Basic Table 4. Enrolment in Kindergarten by Age and Population of Corresponding Age Group in Various Major Countries (Table 1)

Country	Age	Latest Year Available			1964	
		Year	Age Group	Enrolment	Age Group	Enrolment
Japan	3	1969	1,574,000	68,701	1,548,000	44,600
	4		1,691,000	602,727	1,570,000	346,026
	5		1,630,000	879,589	1,562,000	670,342
	3~5		4,895,000	1,551,017	4,680,000	1,060,968
U.S.A.	3	1968	3,811,000	317,000	4,149,000	203,000
	4		4,000,000	911,000	4,238,000	684,000
	5		4,095,000	3,145,000	4,162,000	2,964,000
	3~5		11,905,000	4,373,000	12,549,000	3,851,000
England & Wales	3	1967	853,000	28,442	793,000	24,306
	4		831,000	238,464	786,000	214,951
	3~4		1,684,000	266,906	1,561,000	239,257
France	3	1967	864,900	440,200	836,200	352,800
	4		856,400	680,100	817,200	590,500
	5		829,900	821,100	830,700	798,500
	3~5		2,551,200	1,941,400	2,484,100	1,741,800
Germany (F.R.)	3~6	1967	3,028,300	1,027,458	2,791,400	920,178

Note: U.S.A.; Number of 3, 4 and 5 years old children enrolled in kindergarten, nursery school and elementary school. Figures in the column "1964" are actually 1965 figures.

England & Wales; Number of children of 3 and 4 year enrolled in nursery school and in nursery classes attached to primary schools.

France; Includes 5 years old children enrolled in elementary school.

Germany (F.R.); Kindergarten enrolment quota.

Basic Table 5. Actual Enrolment in Schools at the Level of Compulsory Education and Population of the Corresponding Age Group in Various Major Countries (Table 3)

Country	Year	Length of Compulsory Education	Population of Age Group	Enrolment
Japan	1968	6~14 (9 years)	14,397,523	14,376,718
U.S.A.	1966	7~13 (7 years)	28,288,000	27,895,000
England & Wales	1967	5~14 (10 years)	7,116,000	7,112,000
France	1967	6~14 (9 years)	7,448,200	7,352,500
Germany (F.R.)	1965	6~13 (8 years)	6,567,900	6,564,874

Basic Table 6. Trends of Enrolment in Special Schools at the Level of Compulsory Education (Figure 6)

Year	Special Schools and Classes					Total Enrolment in Compulsory Level Schools
	Total	Special Schools for the Blind	Special Schools for the Deaf	Special Schools for Handicapped Children Other Than the Blind and Deaf	Special Classes	
1959	54,346	5,277	16,814	3,600	28,655	18,580,710
1960	61,041	5,221	16,380	4,604	34,836	18,516,858
1961	68,963	5,320	16,064	6,143	41,436	18,763,094
1962	79,308	5,412	15,686	7,986	50,224	18,864,343
1963	89,929	5,480	15,158	10,009	59,282	17,466,005
1964	102,795	5,468	14,500	12,313	70,514	16,538,964
1965	114,714	5,348	13,776	13,921	81,669	15,765,207
1966	129,499	5,280	12,897	15,878	95,444	15,173,878
1967	141,901	5,231	12,081	18,151	106,438	14,758,385
1968	152,978	5,076	11,465	19,442	116,995	14,462,234
1969	159,557	4,915	10,836	20,890	122,916	14,305,030

Basic Table 7. Trends in the Percent of Compulsory School Graduates Going on to Upper Secondary Schools (Figure 7)

Year	Boys			Girls		
	Number of Graduates from Lower Secondary Schools	Number of Lower Secondary School Graduates Entering Upper Secondary Schools(1)	Percent of Lower Secondary School Graduates Entering Upper Secondary Schools	Number of Graduates from Lower Secondary Schools	Number of Lower Secondary School Graduates Entering Upper Secondary Schools(1)	Percent of Lower Secondary School Graduates Entering Upper Secondary Schools
			%			%
1959	1,000,942	575,931	57.5	973,930	517,792	53.2
1960	897,409	534,653	59.6	873,074	487,771	55.9
1961	712,603	454,553	63.8	689,043	418,365	60.7
1962	995,360	651,726	65.5	952,297	595,588	62.5
1963	1,271,978	870,171	68.4	1,219,253	794,233	65.1
1964	1,237,368	873,808	70.6	1,189,434	807,817	67.9
1965	1,204,018	863,063	71.7	1,155,540	804,017	69.6
1966	1,088,146	799,656	73.5	1,045,362	743,824	71.2
1967	994,045	748,277	75.3	953,192	702,590	73.7
1968	942,126	725,717	77.0	904,661	691,874	76.5
1969	886,596	702,322	79.2	850,862	676,638	79.5
1970	851,837	694,909	81.6	815,227	673,989	82.7

Note: (1) Includes part-time students.

Basic Table 8. Trends in the Percent of Compulsory School Graduates Going on to Upper Secondary Schools by Prefecture (Figure 8)

Prefecture	Percent of Lower Secondary School Graduates Entering Upper Secondary Schools in March, 1970		Percent of Lower Secondary School Graduates Entering Upper Secondary Schools in March, 1969 (B)	Difference between (A – B)
	Rank	Percent (A)		
		%	%	%
National Average		82.1	69.3	12.8
Tokyo	1	94.4	86.5	7.9
Hiroshima	2	93.0	81.6	11.4
Kanagawa	3	91.1	78.8	12.3
Osaka	4	89.2	77.7	11.5
Kyoto	4	89.2	74.5	14.7
Toyama	6	88.9	74.3	14.6
Okayama	7	88.8	75.2	13.6
Kagawa	8	88.3	78.1	10.2
Hyogo	9	87.3	73.3	14.0
Yamaguchi	10	87.2	76.2	11.0
Nagano	11	86.1	70.9	15.2
Aichi	12	85.8	72.2	13.6
Nara	12	85.8	74.0	11.8
Ishikawa	14	85.5	66.9	18.6
Tottori	15	85.2	73.3	11.9
Yamanashi	16	85.1	74.3	10.8
Saitama	17	84.2	67.7	16.5
Fukuoka	18	84.1	73.6	10.5
Gifu	19	84.0	63.9	20.1
Fukui	19	84.0	65.9	18.1
Gunma	21	83.7	66.9	16.8
Shizuoka	22	82.7	67.5	15.2
Oita	23	82.6	72.8	9.8
Mie	24	81.4	64.1	17.3
Ehime	25	80.9	65.2	15.7
Shiga	26	80.7	63.8	16.9
Saga	26	80.7	66.4	14.3
Chiba	26	80.7	65.7	15.0
Wakayama	29	80.4	67.9	12.5
Yamagata	30	79.2	62.9	16.3
Shimane	31	77.1	62.6	14.5
Niigata	31	77.1	62.2	14.9
Kagoshima	33	76.9	59.1	17.8
Miyagi	34	76.6	62.8	13.8
Tochigi	34	76.6	59.9	16.7
Tokushima	36	75.2	63.3	11.9
Kochi	37	74.8	60.2	14.6
Hokkaido	38	74.6	65.5	9.1
Ibaragi	39	73.2	59.1	14.1
Kumamoto	40	73.0	58.7	14.3
Fukushima	40	73.0	61.7	11.3
Miyazaki	40	73.0	51.9	21.1
Akita	43	72.5	63.1	9.4
Nagasaki	44	71.1	55.5	15.6
Iwate	45	66.8	55.8	11.0
Aomori	46	66.3	54.8	11.5

Basic Table 9. Trends in Enrolment in Upper Secondary Schools by Type of Enrolment (Figure 9, Table 6)

Year	Total	Full-time	Part-time	Correspondence Course
1959	3,263,185	2,658,941	542,606	61,638
1960	3,291,359	2,710,115	515,830	65,414
1961	3,178,750	2,641,975	464,728	72,047
1962	3,349,996	2,822,600	447,784	79,612
1963	3,981,555	3,425,985	459,947	95,623
1964	4,733,588	4,145,517	479,657	108,414
1965	5,188,725	4,553,759	511,898	123,068
1966	5,118,093	4,480,179	507,158	130,756
1967	4,905,883	4,292,283	477,301	136,299
1968	4,658,388	4,068,831	442,838	146,719
1969	4,479,482	3,923,383	404,567	151,532
1970	4,379,439	3,851,973	370,867	156,599

Note: Excludes the enrolment in advanced courses and short-term courses.

Basic Table 10. Trends in Enrolment in Upper Secondary Schools by Course (Figure 10, 11)

Year	General	Agriculture	Fishery · Mercantile Marine	Technical	Commercial	Domestic Arts	Others
1959	1,873,080	220,844	16,294	305,687	524,649	256,118	4,847
1960	1,880,826	215,630	16,137	323,520	532,360	252,350	5,122
1961	1,816,322	193,716	15,678	339,305	512,291	224,604	4,787
1962	1,910,642	193,887	16,120	381,693	540,592	222,468	4,982
1963	2,282,961	211,576	17,762	475,505	652,259	240,093	5,776
1964	2,733,801	243,976	19,926	565,270	785,283	269,175	7,743
1965	3,013,235	263,869	21,216	624,105	857,379	277,244	8,809
1966	2,967,700	261,530	21,433	617,771	838,112	269,735	11,056
1967	2,822,328	251,394	21,452	597,721	806,777	254,574	15,338
1968	2,657,553	240,663	20,356	575,637	757,995	238,843	20,622
1969	2,534,164	231,265	19,475	567,197	720,147	227,974	27,728
1970	2,468,302	222,737	18,905	565,508	691,883	220,178	35,327

Note: Excludes the enrolment in advanced courses and short-term courses.

Basic Table 11. Enrolment in Full-Time Private Upper Secondary Schools by Prefecture in 1970 (4–(2)–a Number of Students by Type of Enrolment)

Prefecture	Total	Private	Percent of Students Enrolled in Private Schools
Total	3,851,973	1,258,498	32.7
Hokkaido	196,142	61,192	31.2
Aomori	55,132	13,430	24.4
Iwate	58,708	11,097	18.9
Miyagi	77,932	23,385	30.0
Akita	54,726	7,836	14.3
Yamagata	57,116	16,717	29.3
Fukushima	91,012	15,854	17.4
Ibaraki	84,798	17,752	20.9
Tochigi	69,153	22,260	32.2
Gunma	69,705	16,613	23.8
Saitama	98,146	17,751	18.1
Chiba	103,742	32,904	31.7
Tokyo	382,070	228,419	59.8
Kanagawa	144,093	69,262	48.1
Niigata	96,703	17,174	17.8
Toyama	42,798	9,707	22.7
Ishikawa	39,316	8,026	20.4
Fukui	30,306	7,014	23.1
Yamanashi	37,180	6,028	16.2
Nagano	80,124	16,606	20.7
Gifu	63,994	15,214	23.8
Shizuoka	120,622	39,063	32.4
Aichi	173,899	72,275	41.6
Mie	55,704	9,494	17.0
Shiga	31,744	3,773	11.9
Kyoto	76,448	34,427	45.0
Osaka	223,579	110,705	49.5
Hyogo	150,434	47,345	31.5
Nara	33,267	9,344	28.1
Wakayama	35,160	2,268	6.5
Tottori	29,015	6,079	21.0
Shimane	34,048	5,543	16.3
Okayama	69,531	17,596	25.3
Hiroshima	102,081	37,850	37.1
Yamaguchi	65,135	20,653	31.7
Tokushima	33,202	1,798	5.4
Kagawa	39,061	9,102	23.3
Ehime	60,987	14,582	23.9
Kochi	28,070	5,936	21.2
Fukuoka	169,778	67,110	39.5
Saga	41,640	9,872	23.7
Nagasaki	68,419	20,177	29.5
Kumamoto	76,746	27,423	35.7
Oita	58,409	13,189	22.6
Miyazaki	47,604	13,388	28.1
Kagoshima	94,494	25,265	26.7

Basic Table 12. Number of Students Enrolled in Upper Secondary Schools and Those Enrolled in General Courses of Upper Secondary Schools in 1970 (4–(2)–b Number of Students by Course)

Prefecture	Total Upper Secondary Schools			Public Upper Secondary Schools		
	Total Enrolment	General Course Enrolment	Percent of Students Enrolled in General Courses	Total Enrolment	General Course Enrolment	Percent of Students Enrolled in General Courses
Total	4,222,840	2,468,302	58	2,933,134	1,684,388	57
Hokkaido	230,087	141,745	62	168,791	96,540	57
Aomori	60,922	35,918	59	47,492	29,248	62
Iwate	64,565	36,775	57	53,454	31,436	59
Miyagi	83,255	52,252	63	59,459	35,388	60
Akita	62,227	34,866	56	54,391	30,101	55
Yamagata	62,924	32,066	51	46,207	22,042	48
Fukushima	98,051	51,056	52	82,166	44,813	55
Ibaraki	89,566	59,398	66	71,814	45,095	63
Tochigi	73,822	36,101	49	51,446	25,919	36
Gunma	77,414	44,755	58	60,735	37,067	61
Saitama	108,124	68,761	64	89,893	58,956	66
Chiba	109,457	67,044	61	76,382	45,530	60
Tokyo	420,748	296,335	70	184,092	122,603	67
Kanagawa	163,181	113,087	69	91,113	60,569	66
Niigata	113,867	59,512	52	96,693	51,132	53
Toyama	48,262	19,968	41	38,555	13,626	35
Ishikawa	43,601	25,667	59	35,126	18,837	54
Fukui	33,358	17,961	54	26,344	15,077	57
Yamanashi	39,974	22,463	56	33,921	19,426	57
Nagano	87,311	57,091	65	70,705	46,314	66
Gifu	76,376	43,298	57	61,011	32,994	54
Shizuoka	129,368	78,157	60	90,064	53,587	59
Aichi	194,313	102,681	53	117,179	63,684	54
Mie	60,556	34,477	57	50,025	26,408	53
Shiga	34,368	17,201	50	29,825	15,278	51
Kyoto	83,487	52,313	63	47,892	28,927	60
Osaka	249,907	157,314	63	135,639	85,702	63
Hyogo	167,824	114,014	68	120,285	76,117	63
Nara	36,940	23,388	63	25,692	14,169	55
Wakayama	38,223	22,970	60	35,941	20,702	58
Tottori	29,697	15,791	53	23,618	13,024	55
Shimane	35,248	17,621	50	29,591	16,028	54
Okayama	76,593	39,397	51	57,476	27,873	48
Hiroshima	108,894	60,388	55	69,615	40,573	58
Yamaguchi	67,890	35,545	52	47,237	26,357	56
Tokushima	35,507	17,888	50	33,709	16,835	50
Kagawa	42,346	20,867	49	32,866	16,638	51
Ehime	64,938	39,732	61	50,138	31,438	63
Kochi	30,343	18,012	59	24,407	12,742	52
Fukuoka	179,118	97,012	54	111,945	68,697	61
Saga	44,869	200,056	45	34,997	16,211	46
Nagasaki	75,415	42,481	56	55,011	32,015	58
Kumamoto	80,247	39,734	50	52,500	29,107	55
Oita	60,154	29,686	49	46,965	25,370	54
Miyazaki	49,828	17,511	35	36,440	13,029	36
Kagoshima	99,675	37,947	38	74,287	31,164	47

Note: Includes students enrolled in part-time courses.

Basic Table 13. Number of Compulsory School Graduates and Number Entering Upper Secondary Schools in Various Major Countries (Table 7)

a. Latest Year Available

Country	Year	Final Grade of Compulsory Education	Number of Compulsory School Graduates	Enrolment in the First Year after Compulsory Education
Japan	1970	9	1,667,064	1,368,898
U.S.A.	1967	9	3,522,000	3,442,000
England & Wales	1967	10	438,736	234,903
France	1967	9	691,000	504,800
Germany (F.R.)	1965	8	671,684	338,388

b. 1964

Country	Final Grade of Compulsory Education	Number of Compulsory School Graduates	Enrolment in the First Year after Compulsory Education
Japan	9	2,426,802	1,607,748
U.S.A.	9	3,190,000	3,085,000
England & Wales	10	480,861	209,779
France	8	809,800	502,700
Germany (F.R.)	8	695,326	330,726

Basic Table 14. Number of Those Enrolled in Part-time Educational and Training Institutions after Completing Compulsory Education in Various Major Countries (Table 8)

Country	Year	Age	Population of Age Group	Enrolment in Upper Secondary Schools	Enrolment in Part-time Educational and Training Institutions
England & Wales (1)	1967	15~17	1,992,000	777,827	675,833
France (2)	1965	15~17	2,591,000	1,298,200	597,800
Germany (F.R.) (3)	1966	16~18	2,351,000	507,300	1,190,200

Note: (1) Enrolment in educational and training courses offered by colleges of further education.
(2) Enrolment in Adult Education Centres and vocational training institutions administered by the Ministry of Labor and those in vocational training institutions established jointly by the Chambers of Commerce and Industries.
(3) Number of those enrolled in part-time educational institutions after graduation from full-time compulsory schools.

Basic Table 15. Trends in Number of Entrants into Universities and Junior Colleges (Figure 12, 13)

Year	Universities				Junior Colleges			
	Total	National	Local Public	Private	Total	National	Local Public	Private
1959	155,686	45,817	7,227	102,642	37,889	2,201	5,087	30,601
1960	166,761	46,490	7,618	112,653	42,318	2,499	5,293	34,526
1961	179,622	48,241	8,148	123,233	47,278	2,980	5,748	38,550
1962	201,125	50,331	8,661	142,133	55,613	3,021	6,226	46,366
1963	215,884	50,690	9,119	156,075	61,417	3,068	6,120	52,229
1964	217,763	51,129	8,381	158,253	61,070	2,704	6,221	52,145
1965	249,917	54,681	9,130	186,106	80,563	2,502	6,495	71,566
1966	292,958	59,960	10,453	222,545	108,052	2,880	7,255	97,997
1967	312,747	63,396	10,923	238,428	121,263	2,877	7,127	111,259
1968	325,632	65,074	10,901	249,657	127,365	3,100	7,459	116,806
1969	329,374	61,534	10,863	256,977	128,124	3,114	7,424	117,586

Note: Excludes the entrants to advanced courses and short-time courses.

Basic Table 16. Trends in Enrolments in Universities and Junior Colleges (Figure 14)

Year	Universities			Junior Colleges		
	Total	Public	Private	Total	Public	Private
1959	584,084	210,999	373,085	75,697	16,296	59,401
1960	611,577	213,776	397,801	83,457	17,738	65,719
1961	653,555	220,174	433,381	93,361	19,518	73,843
1962	709,042	228,140	480,902	107,714	21,220	86,494
1963	773,381	236,612	536,769	122,292	21,799	100,493
1964	828,427	245,387	583,040	127,904	21,697	106,207
1965	909,102	257,702	651,400	147,563	21,663	125,900
1966	1,011,511	277,018	734,493	194,997	23,059	171,938
1967	1,123,956	296,234	827,722	234,748	24,218	210,530
1968	1,232,528	315,219	917,309	255,262	25,202	230,060
1969	1,315,404	326,784	988,620	263,362	26,042	237,320

Note: Includes auditors etc.

Basic Table 17. Trends in Enrolment (1) in Universities by Faculty
(Figure 15, 16)

Year	Literature	Law & Economics	Science & Engineering	Agriculture	Medicine, Dentistry and Pharmacy (Including Nursing)	Teacher Training (Including Physical Education)	Others
1959	83,923	233,761	97,809	26,226	28,400	59,920	42,422
1961	99,673	264,551	123,518	29,277	29,399	59,154	38,450
1963	116,943	316,161	162,498	33,286	31,832	60,571	41,458
1964	125,640	336,874	180,519	34,855	33,328	61,555	44,980
1965	138,722	367,016	203,459	36,721	35,613	63,833	50,101
1966	159,741	405,132	225,564	38,532	38,056	67,587	57,884
1967	182,746	443,897	255,388	42,215	41,788	71,999	65,853
1968	201,688	479,758	282,882	45,398	46,418	76,842	78,082
1969	215,750	509,060	310,052	48,361	49,658	80,174	82,716

Note: (1) Enrolment in regular undergraduated courses only.

Basic Table 18. Trends in Enrolment in Universities by Faculty (Table 10)

	Literature	Law & Economics	Science & Engineering	Agriculture	Medicine, Dentistry and Pharmacy (Including Nursing)	Teacher Training (Including Education)	Others
Enrolment in 1964	125,640	336,874	180,519	34,855	33,328	61,555	44,980
Public	23,952	35,530	68,504	19,988	14,164	56,140	19,254
Private	101,688	301,344	112,015	14,867	19,164	5,415	25,726
Enrolment in 1969	215,750	509,060	310,052	48,361	49,658	80,174	82,716
Public	29,614	52,426	96,674	25,456	17,500	66,058	27,252
Private	186,136	456,634	213,378	22,905	32,158	14,116	55,464

Basic Table 19. Trends in Female Enrolment in Universities and Junior Colleges (Figure 17)

Year	University		Junior College	
	Male	Female	Male	Female
1959	506,216	77,868	26,486	49,211
1960	526,604	84,973	27,100	56,357
1961	558,675	94,880	29,686	63,675
1962	601,016	108,026	33,044	74,670
1963	652,728	120,653	36,097	86,195
1964	696,666	131,761	36,779	91,125
1965	759,126	149,971	37,175	110,388
1966	836,565	174,946	41,059	153,938
1967	923,549	200,407	43,954	190,794
1968	1,007,371	225,157	45,898	209,364
1969	1,074,916	240,488	46,761	216,601

Note: Includes auditors, etc.

Basic Table 20. Trends in Female Enrolment in Universities and Junior Colleges by Faculty or Department (Table 11)

Faculty or Department	University		Junior College	
	Total	Female	Total	Female
All Faculty or Department	1,295,771	236,066	259,329	213,416
Literature	171,867	89,272	49,613	47,739
Law & Economics	543,037	27,196	29,997	12,435
Science	39,957	5,461	189	165
Engineering	270,095	1,589	22,123	659
Agriculture	48,361	2,614	3,422	463
Medicine, Dentistry, Pharmacy & Nursing	49,658	19,136	5,496	4,900
Home Economics	23,069	22,988	89,806	89,648
Teacher Training	90,080	45,023	41,893	41,654
Others	59,647	22,787	16,790	15,753

Basic Table 21. Trends in Enrolment in Higher Educational Institutions in Various Major Countries (Figure 18)

Country	1963	1964	1965	1966	1967	1968	1969
Japan	916,863	981,223	1,107,327	1,246,558	1,405,734	1,537,937	1,631,560
U.S.A.	4,494,626	4,950,173	5,526,325	5,885,000	6,348,000	6,928,115	–
Britain	209,432	238,993	282,639	313,260	342,130	–	–
France	320,200	362,800	392,400	454,400	524,000	–	–
Germany (F.R.)	298,075	307,559	312,255	336,255	345,851	–	–
U.S.S.R.	3,261,000	3,608,000	3,861,000	4,123,000	4,311,000	4,470,000	–

Note: Japan; Includes enrolment in fourth and fifth years of technical colleges.
U.S.A.; Enrolment in degree credit courses in higher educational institutions.
Britain; Enrolment in universities, colleges of education and advanced courses in establishments of further education.
France; Enrolment in national universities, "grandes écoles" and post-secondary classes attached to certain "lycées" for students preparing for the entrance examinations to the "grandes écoles".
Germany (F.R.); Excludes colleges of physical education.
U.S.S.R.; Enrolment in universities and colleges.

Basic Table 22. Enrolment in Institutions of Higher Education per 1,000 Inhabitants in Various Major Countries (Table 12)

a. Latest Year Available

Country	Year	Population	Enrolment	Enrolment per 1,000 Inhabitants
Japan	1969	102,647,720	1,659,826	16.2
U.S.A.	1968	199,549,000	6,928,115	34.7
Britain	1967	55,068,000	342,130	6.2
France	1967	49,650,000	524,000	10.6
Germany (F.R.)	1967	59,872,800	345,851	5.8
U.S.S.R.	1968	236,700,000	4,469,700	18.9

b. 1964

Country	Population	Enrolment	Enrolment per 1,000 Inhabitants
Japan	97,186,000	995,874	10.2
U.S.A.	191,334,000	4,950,173	25.9
Britain	54,213,000	238,993	4.4
France	48,134,000	362,800	7.5
Germany (F.R.)	58,266,000	307,559	5.3
U.S.S.R.	226,460,000	3,608,000	15.9

Basic Table 23. Enrolment in Higher Educational Institutions by Field of Study in Various Major Countries (Table 13)

Country	Year	Total	Humanities & Social Sciences	Science & Engineering	Education	Medicine & Dentistry	Others
Japan	1968	1,475,191	757,743	365,641	115,323	47,587	188,897
U.S.A.	1967	666,710	355,526	126,178	134,905	11,366	38,735
Britain	1967	260,888	70,250	75,657	96,235	18,746	–
France	1966	433,248	240,418	125,356	–	52,242	15,232
Germany (F.R.)	1967	290,325	116,917	75,307	55,818	34,580	16,703
U.S.S.R.	1968	4,469,700	328,500	2,447,200	1,360,300	294,400	39,300

Note: Japan; Enrolment in undergraduate courses of universities, regular courses in junior colleges and fourth and fifth years of technical colleges.
U.S.A.; Bachelor's and first professional degrees.
Britain; Enrolment in undergraduate courses. Figure for "Education" shows enrolment in Colleges of Education.
France; National universities only. Includes foreign students. Figure in the column "Others" shows enrolment in Faculty of Pharmacy.
Germany (F.R.); Excludes Colleges of Arts and Physical Education.
U.S.S.R.; Figure in "Humanities & Social Sciences" shows enrolment in colleges of law and economics and that in "Education" shows enrolment in universities and colleges of education.

Basic Table 24. Number of Students Obtaining Degrees within the Regular Period in Japan and Britain (Table 14)

Country	Years in Which Degrees were Obtained	Regular Period	Number of Students at the Time of Entrance	Number of Students Who Obtained Degrees within the Regular Period
Japan	1966	4 years	217,439	187,418
	1967		225,258	194,628
	1968		259,164	217,805
Britain	1965	3 years	35,386	27,496

Basic Table 25. Number of Female Students in Institutions of Higher Education in Various Major Countries (Figure 19)

a. Latest Year Available

Country	Year	Total	Female
Japan	1969	1,631,560	460,810
U.S.A.	1968	6,982,115	2,809,113
Britain	1967	260,103	115,657
France	1967	524,000	230,600
Germany (F.R.)	1967	345,851	105,029
U.S.S.R.	1968	3,608,000	1,551,000

b. 1964

Country	Total	Female
Japan	981,223	224,729
U.S.A.	4,950,173	1,917,181
Britain	198,655	80,056
France	362,800	158,600
Germany (F.R.)	307,559	86,934
U.S.S.R.	4,470,000	2,101,000

Note: Japan; Includes enrolment in fourth and fifth years in technical colleges
U.S.A.; Includes graduate students
Britain; Enrolment in universities and colleges of education
France; National universities only
Germany; Enrolment in universities and teacher training colleges
U.S.S.R.; Enrolment in universities and colleges

Basic Table 26. Trends in Number of Graduate School Students (Figure 20)

Year	Master's Course			Doctor's Course		
	Total	Public	Private	Total	Public	Private
1959	8,510	4,030	4,480	6,840	5,394	1,446
1960	8,305	4,000	4,305	7,429	5,779	1,650
1961	8,494	4,198	4,296	8,143	6,160	1,983
1962	9,273	4,969	4,304	8,789	6,604	2,185
1963	11,103	6,281	4,822	9,616	7,172	2,444
1964	13,654	8,096	5,558	10,491	7,846	2,645
1965	16,771	10,313	6,458	11,683	8,142	3,041
1966	20,355	12,791	7,564	12,430	9,333	3,097
1967	23,156	14,238	8,918	13,313	9,736	3,577
1968	23,950	14,810	9,140	13,711	9,728	3,983
1969	25,576	15,709	9,867	13,847	9,607	4,240

Basic Table 27. Number of Graduate School Students Obtaining Master's or Doctor's Degrees by Field of Study (March 1969) (Table 16)

	All Fields	Humanities	Social Sciences	Sciences	Engineering	Agriculture	Medicine, Dentistry & Pharmacy	Home Economics	Education	Arts
Master's	9,194	1,201	1,292	1,267	3,981	700	299	71	231	152
Doctor's	4,565	45	87	516	609	287	3,006	–	15	–

Basic Table 28. Trends in Number of Master's or Doctor's Degree Recipients in Various Major Countries (Table 17)

Country		1964	1965	1966	1967	1968
Japan	Master's Degree	4,763	5,938	7,503	9,169	9,194
	Doctor's Degree	3,241	3,868	4,286	4,676	4,565
	Total	8,004	9,806	11,789	13,845	13,759
	Population	thousand 97,186	98,275	99,056	100,243	101,408
U.S.A.	Master's Degree	112,195	140,555	147,300	176,749	190,000
	Doctor's Degree	16,467	18,237	19,800	23,089	26,300
	Total	128,662	158,792	167,100	199,838	216,300
	Population	thousand 191,334	193,813	195,857	199,118	201,152
Britain	Master's Degree	–	3,006	4,062	5,160	–
	Doctor's Degree	–	3,447	3,858	4,553	–
	Total	4,914	6,453	7,910	9,713	–
	Population	thousand 54,213	54,595	54,895	55,068	–
France	Doctor's Degree	4,981	5,068	5,781	6,470	–
	Population	thousand 48,134	48,687	49,150	49,650	–
Germany (F.R.)	Doctor's Degree	6,974	6,971	6,265	8,056	–
	Population	thousand 58,266	59,012	59,638	59,873	–
U.S.S.R.	Master's Degree	15,320	19,240	21,820	23,618	25,488
	Population	thousand 226,400	229,300	231,800	234,400	236,700

Basic Table 29. Number of Master's or Doctor's Degree Recipients in Various Major Countries by Field of Study (Table 18)

Country	Year	Type of Degree	Total	Humanities & Social Sciences	Science & Engineering	Education	Medicine & Dentistry	Others
Japan	1968	Master's	9,194	2,694	5,948	30	299	223
		Doctor's	4,565	147	1,412	–	3,006	–
U.S.A.	1967	Master's	176,749	65,800	34,596	63,503	–	12,762
		Doctor's	34,455	7,494	11,006	4,079	11,366	510
Britain	1967	Master's	5,221	2,236	2,512	340	133	–
		Doctor's	4,632	780	3,347	41	464	–
France	1967	Doctor's	6,470	944	2,391	–	3,024	111
Germany (F.R.)	1967	Doctor's	8,065	800	2,299	156	3,401	400
U.S.S.R.	1968	Master's	98,139	17,646	73,354	1,797	5,342	–

Basic Table 30. Trends in the Educational Attainments of the Working-Age Population (15–64 Years of age) (Figure 22)

(In thousand)

Year	Working-Age (1) Population	Population by Educational Attainment			
		No Education (2)	Elementary Education	Secondary Education	Higher Education
1935	40,491	4,782	32,012	3,080	617
1940	42,102	3,439	34,035	3,892	736
1950	49,667	1,049	40,081	7,105	1,432
1955	54,228	482	41,711	10,373	2,162
1959	59,654	370	42,742	13,703	2,836
1960	60,004	346	42,464	14,205	2,987
1961	60,715	333	42,362	14,825	3,194
1962	62,262	323	42,448	16,052	3,438
1963	63,905	314	42,452	17,466	3,671
1964	65,580	305	42,491	18,850	3,932
1965	66,928	293	42,398	19,919	4,315
1966	68,125	282	42,174	20,947	4,719
1967	69,158	269	41,882	21,851	5,154
1968	70,089	258	41,526	22,721	5,583

Note: (1) Estimated from the data of the National Census and the Report on Basic School Statistics. Includes those who are enrolled in educational institutions.

(2) Those of the total population aged 15~64 who were never enrolled in any educational institution.

Basic Table 31. Participation of the People in Social Educational Activities by Type of Activity, 1967 (Figure 23)

a. By Type of Region

(Unit: hour·minute)

	Male					Female				
	All Regions	Large Cities	Medium Cities	Small Cities	Town & Village	All Regions	Large Cities	Medium Cities	Small Cities	Town & Village
Cultural Activities	8.58	11.15	9.02	8.08	8.55	8.48	12.51	9.40	7.22	7.38
Physical Education & Sports Activities	12.55	14.31	13.55	13.02	11.37	8.25	8.48	9.23	8.23	7.47
Classes and Lectures	9.28	13.51	9.56	8.07	9.13	10.52	10.47	12.07	11.27	9.23

b. By Age

(Unit: hour · minute)

	Male							
	Total	Age 15~19	20~24	25~29	30~39	40~49	50~59	60 and over
Cultural Activities	8.58	12.43	13.36	7.53	7.35	6.50	8.16	7.52
Physical Education & Sports Activities	12.55	22.02	14.34	11.46	10.16	10.23	9.58	14.18
Classes and Lectures	9.28	17.07	10.55	11.28	8.02	8.04	7.32	8.28

	Female							
	Total	Age 15~19	20~24	25~29	30~39	40~49	50~59	60 and over
Cultural Activities	8.48	12.54	10.54	7.53	6.31	8.16	7.15	7.04
Physical Education & Sports Activities	8.25	14.37	8.57	7.10	6.55	6.40	8.08	7.52
Classes and Lectures	10.52	15.14	17.02	12.29	8.45	9.14	9.30	10.10

c. By Educational Attainment

(Unit: hour · minute)

	Male					Female				
	Total	Elementary School	Lower Secondary School	Upper Secondary School	University	Total	Elementary School	Lower Secondary School	Upper Secondary School	University
Cultural Activities	8.58	8.25	6.55	9.53	9.11	8.48	5.35	5.17	9.08	14.11
Physical Education & Sports Activities	12.55	8.57	9.13	14.51	13.32	8.25	6.27	6.43	9.17	8.51
Classes and Lectures	9.28	5.04	7.06	11.26	9.40	10.52	7.23	7.26	11.58	16.18

Note: Figures indicate average hours of 25,000 persons (from 10,000 households) who have participated in respective activities during one month.

Basic Table 32. Trends in Enrolment in Miscellaneous Schools by Course (Figure 24)

		Total	Home Economics(1)	Clerical(2)	Technical(3)	Hobbies(4)	Others(5)
Male	1950	81,090	1,620	47,186	20,516	2,378	9,390
	1959	288,413	2,706	102,902	96,285	5,311	81,209
	1970	418,278	12,626	84,209	151,715	10,611	159,117
Female	1950	405,519	319,163	31,424	13,610	2,522	38,800
	1959	889,986	626,475	114,117	45,625	20,097	83,672
	1970	934,408	539,897	121,671	138,735	23,426	110,679

Note: (1) Sewing, knitting and handicraft, cooking and study on nutrition and home making, etc.
(2) Bookkeeping and practice of abacus, commerce, language, typing, etc.
(3) Industry, automobile, beauty arts, nursing and midwifery, medical treatment, teacher training, agriculture, etc.
(4) Tea ceremony, flower arrangement, calligraphy, music, and fine arts, etc.
(5) Includes enrollments in courses of general culture, schools for foreign students and preparatory schools, etc.

Basic Table 33. Number of Trainees in Authorized Non-Public Training Centers by Major Category of Industry (Figure 25)

	Total	Mining	Construction	Manufacturing	Wholesale & Retail Trade	Transportation & Communication	Electricity, Gas & Running Water	Services
Provided by Single Enterprise	24,677	63	2,338	18,229	–	652	2,786	609
Provided by Two or More Enterprises	58,966	–	36,684	20,229	510	–	24	1,519
Total	83,643	63	39,022	38,458	510	652	2,810	2,128

Chapter 2. Improvement of Educational Contents and Method

Basic Table 34. (Deleted in English edition)

Basic Table 35. Number of Schools Equipped with Teaching Machines
(Table 33)

	Elementary School		Lower Secondary School		Upper Secondary School	
	Total Number of Schools	Number of Schools Having such Machines	Total Number of Schools	Number of Schools Having such Machines	Total number of Schools	Number of Schools Having such Machines
Slide Projectors	3,220	2,923	1,764	1,562	3,272	3,071
8mm Projectors	3,220	2,048	1,764	1,093	3,272	2,436
16mm Projectors	3,220	1,302	1,764	597	3,272	2,621
Overhead Projectors	3,220	519	1,764	461	3,272	2,015
Tape Recorders	3,220	3,080	1,764	1,712	3,272	3,081
Television Sets	3,220	2,685	1,764	1,233	3,272	2,289
Radio Sets	3,220	2,574	1,764	1,015	———	
Video Tape Recorders	24,497	811	10,580	679	3,272	535
Language Laboratories	———		10,580	334	3,272	119

Note: Data mainly from "Survey on School Equipment" (public elementary schools consisting of 5, 12, 18, 24 or 36 classes, and public lower secondary schools consisting of 5, 9, 15, 21, 27 or 33 classes were surveyed), however, the data on video tape recorders, language laboratories and the various machines in upper secondary schools are from the "Survey on Audio-visual Educational Machines" (all schools were surveyed).

Basic Table 36. Average Height and Weight of Pupils (Figure 28)

Age	1969				1949			
	Height		Weight		Height		Weight	
	Male	Female	Male	Female	Male	Female	Male	Female
	cm	cm	kg	kg	cm	cm	kg	kg
6	114.2	113.4	20.0	19.5	108.6	107.7	18.5	17.9
7	119.8	119.0	22.3	21.8	113.5	112.7	20.3	19.7
8	125.1	124.2	24.8	24.3	118.1	117.3	22.3	21.5
9	130.0	129.7	27.4	27.2	122.4	121.8	24.2	23.6
10	134.9	134.7	30.4	30.8	126.6	126.2	26.3	25.8
11	140.0	142.1	33.6	35.2	130.6	131.0	28.5	28.6
12	146.5	148.0	38.1	40.2	135.6	136.8	31.4	32.4
13	153.6	151.7	43.6	44.6	140.7	141.8	34.8	36.5
14	160.0	153.7	49.1	47.8	146.7	146.0	39.3	40.8
15	164.7	154.8	54.0	50.0	154.2	149.8	45.7	45.0
16	166.7	155.2	56.6	51.3	158.7	151.5	49.9	47.6
17	167.6	155.4	58.1	51.8	161.2	152.3	52.6	49.2
18	166.5	154.5	58.0	51.9	162.1	152.8	53.9	50.3

Basic Table 37. Number of Schools Having Doctors, Dentists, Pharmacists and Nursing Teachers (Table 39)

	Elementary School			Lower Secondary School		
	1959	1964	1969	1959	1964	1969
Doctor	25,590	25,461	24,516	12,121	11,499	10,484
Dentist	23,695	24,632	23,939	11,159	11,105	10,205
Pharmacist	3,767	20,130	20,640	1,660	9,057	8,771
Nursing Teacher	6,689	7,439	9,913	1,614	2,924	4,116
Total Number of Schools	26,681	25,976	24,781	12,460-	11,611	10,610

Basic Table 38. Number of Schools Providing School Lunch Service (May, 1970) (Table 41)

School Level		Schools Providing School Lunch				Total Number of Schools and Pupils in the Country
		Total	Full Meals	Supplementary Service	Milk Service	
Elementary School	Number of Schools	23,876	20,441	761	2,674	(24,790)
	Number of Pupils	9,311,906	8,732,983	74,580	504,343	(9,493,486)
Lower Secondary School	Number of Schools	9,368	5,541	335	3,492	(11,040)
	Number of Pupils	3,919,499	2,105,795	49,435	1,764,269	(4,716,836)

Basic Table 39. Diffusion of School Lunch Service (Figure 29)

	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Elementary School	%	%	%	%	%	%	%	%	%	%	%
Full Meal	57.7	60.7	64.2	68.3	72.4	76.2	79.8	83.8	86.1	88.7	90.8
Supplementary & Milk Service	6.9	5.7	5.8	4.9	5.0	15.1	13.5	11.5	9.8	8.0	7.1
Lower Secondary School											
Full Meal	6.7	7.8	9.0	10.2	12.0	14.9	21.3	24.6	30.3	36.5	40.2
Supplementary & Milk Service	3.8	3.9	3.6	2.5	3.5	47.8	53.8	51.6	47.5	43.8	41.7

Chapter 3. Adequacy of Teaching Staff and Provision of School Facilities

Basic Table 40. Changes in Percent Distribution of Number of Classes by Size (Figure 30)

Year	Total	Less than 30	31~40	41~45	46~50	51 and more
Elementary Schools	%	%	%	%	%	%
1959	100.0	12.3	19.5	15.7	23.3	29.2
1964	100.0	25.6	33.8	26.4	13.7	1.5
1969	100.0	29.3	46.5	22.6	1.5	0.1
Lower Secondary Schools						
1959	100.0	8.9	16.5	19.8	34.5	20.3
1964	100.0	6.8	16.9	36.7	37.3	2.3
1969	100.0	12.2	42.1	43.1	1.9	0.7

Basic Table 41. Number of Classes by Size in Public Elementary and Secondary Schools in Japan, England & Wales and Germany (F.R.) (Table 43)

Country	School Level	Year	Total Number of Classes	Classes with less than 30 Students	Classes with 31~40 Students	Classes with 41~50 Students	Classes with 51 and more Students
Japan	Elementary Schools	1969	280,663	82,413	130,433	67,520	297
	Lower Secondary Schools		125,598	15,236	53,970	56,374	18
England & Wales	Elementary Schools	1967	141,717	45,207	81,271	15,175	64
	Secondary Schools		105,233	66,885	37,340	856	152
Germany (F.R.)	Elementary Schools (Volksschulen)	1969	163,978	50,843	78,956	30,775	3,404
	(Realschulen)		16,558	5,853	8,952	1,727	26
	(Gymnasien)		31,974	18,466	11,168	2,340	–

Basic Table 42. Number of Classes and Full-Time Teachers in Public Elementary and Secondary Schools in Various Major Countries (Table 44)

Country		Elementary Schools			Secondary Schools		
		1964	Latest Year		1964	Latest Year	
Japan	Classes	276,333	280,663	(1969)	147,381	125,598	(1969)
	Teachers	339,693	357,066		232,513	219,275	
England & Wales	Classes	131,213	141,717	(1967)	100,912	105,233	(1967)
	Teachers	144,075	155,555		142,013	147,972	
France	Classes	175,190	182,628	(1967)	83,095	101,336	(1967)
	Teachers	191,053	196,624		124,450	155,527	
Germany (F.R.)	Classes	148,452	155,962	(1966)	30,198	33,897	(1966)
	Teachers	146,336	155,205		45,672	48,418	

Note: Japan; Secondary schools are lower secondary schools only.
Germany (F.R.); Elementary schools are Volksschulen, and secondary schools are Gymnasien only. The numbers in the table exclude those of the three city states.

Basic Table 43. Changes in the Number of Pupils and Students per Teacher (Figure 31)

Year	Kindergartens			Elementary Schools		
	Pupils	Full-Time Teachers	Pupil-Teacher Ratio	Pupils	Full-Time Teachers	Pupil-Teacher Ratio
1955	643,683	24,983	25.8	12,266,952	340,572	36.0
1957	663,253	28,344	23.4	12,956,285	351,532	36.9
1959	699,778	30,134	23.2	13,374,700	367,932	36.4
1961	799,085	32,789	24.4	11,810,874	348,876	33.9
1963	935,805	37,041	25.3	10,471,381	340,212	30.8
1964	1,060,968	40,975	25.9	10,030,970	343,306	29.2
1965	1,137,733	45,193	25.2	9,775,532	345,117	28.3
1967	1,314,607	53,406	24.6	9,452,071	351,426	26.9
1969	1,551,017	62,481	24.8	9,403,193	361,149	26.0

(Continued)

Year	Lower Secondary Schools			Upper Secondary Schools		
	Pupils	Full-Time Teachers	Pupil-Teacher Ratio	Pupils	Full-Time Teachers	Pupil-Teacher Ratio
1955	5,883,692	199,062	29.6	2,592,001	111,617	23.2
1957	5,718,182	195,615	29.2	2,897,646	118,231	24.5
1959	5,180,319	188,766	27.4	3,216,152	128,394	25.0
1961	6,924,693	231,593	29.9	3,118,896	134,378	23.2
1963	6,963,975	245,952	28.3	3,896,682	158,631	24.6
1964	6,415,613	241,630	26.8	4,634,407	178,735	25.9
1965	5,950,630	237,750	25.1	5,074,059	193,524	26.2
1967	5,270,851	232,138	22.7	4,780,628	199,875	23.9
1969	4,865,196	227,407	21.4	4,337,772	200,804	21.6

Year	Universities		
	Students	Full-Time Teachers	Student-Teacher Ratio
1955	503,704	25,295	19.9
1957	538,524	27,231	19.8
1959	572,461	29,156	19.6
1961	644,022	31,697	20.3
1963	762,749	35,195	21.7
1964	817,751	37,431	21.8
1965	895,465	39,500	22.7
1967	1,103,886	45,641	24.2
1969	1,295,771	50,703	25.6

Note: Kindergartens, elementary, lower secondary schools; including principals.
Upper secondary schools; including part-time courses.
Universities; Undergraduate students only. Presidents are included in the number of teachers, but assistants are not.

Basic Table 44. Changes in Number of Pupils, Students and Teachers in Kindergartens, Upper secondary Schools and Universities by Establishing Body (Table 45)

Establishing Body		Kindergartens		Upper Secondary Schools		Universities	
		1964	1969	1964	1969	1964	1969
Total	Pupils and Students	1,060,968	1,551,017	4,634,407	4,337,772	817,751	1,295,771
	Teachers	40,975	62,481	178,735	200,804	37,431	50,703
Public	Pupils and Students	288,424	378,777	3,114,965	3,029,775	237,532	314,980
	Teachers	9,615	13,655	134,939	152,673	21,518	25,882
Private	Pupils and Students	772,544	1,172,240	1,519,442	1,307,997	580,219	980,791
	Teachers	31,360	48,826	43,896	48,131	15,913	24,821

Basic Table 45. Changes in Number of Pupils, Students and Teachers in Various Major Countries (Table 46)

Country		Elementary Schools		Secondary Schools		Universities	
		1964	Latest Year	1964	Latest Year	1964	Latest Year
Japan	Pupils and Students	10,030,990	9,403,193	11,110,100	9,202,968	817,751	1,295,771
	Teachers	343,306	361,147	426,365	428,211	37,431	50,703
U.S.A.	Pupils and Students	48,116,000	51,000,000	–	–	4,950,173	6,928,115
	Teachers	1,858,810	2,199,000	–	–	331,000	449,000
Britain	Pupils and Students	4,273,101	4,655,010	2,819,054	2,895,387	138,711	200,121
	Teachers	144,075	155,555	142,013	147,972	17,117	25,353
France	Pupils and Students	5,731,700	5,496,300	3,071,500	3,598,300	367,701	508,119
	Teachers	228,219	233,967	181,283	216,839	16,904	22,513
Germany (F.R.)	Pupils and Students	5,207,615	5,378,002	1,287,971	1,515,949	239,136	327,318
	Teachers	146,336	155,205	63,863	69,828	8,696	11,562
U.S.S.R.	Pupils and Students	19,900,000	21,100,000	21,900,000	23,700,000	3,608,000	3,860,000
	Teachers	760,000	780,000	1,439,000	1,565,000	206,300	221,800

Note: The numbers for elementary and secondary schools of Britain are those of England & Wales only.

Basic Table 46. Number of Public School Teachers by Academic Background (1968) (Table 47)

School Level	Total	University Graduates	Junior College Graduates	Upper Secondary Graduates
Elementary Schools	329,121	79,163	196,911	53,047
Lower Secondary Schools	207,987	110,081	90,284	7,622
Upper Secondary Schools	140,925	128,502	10,334	2,089

Note: Graduates of old style higher normal schools are included in university graduates, old style normal school graduates are included in junior college graduates.

Basic Table 47. Number of Public Elementary and Lower Secondary School Teachers by Age (1968) (Figure 32)

Age Group	Elementary School Teachers	Lower Secondary School Teachers
Total	329,121	207,987
Less than 24	27,652	15,394
25 ~ 29	31,036	29,029
30 ~ 34	46,871	40,951
35 ~ 39	78,524	50,438
40 ~ 44	72,641	36,837
45 ~ 49	33,099	15,669
50 ~ 54	24,053	11,386
55 and more	15,245	8,283

Basic Table 48. Number of Women Teachers (Table 48)

Year	Elementary Schools		Lower Secondary Schools		Upper Secondary Schools	
	Total	Women Teachers	Total	Women Teachers	Total	Women Teachers
1959	368,077	165,306	188,766	40,407	128,394	22,225
1964	343,306	164,758	241,630	60,043	178,735	30,509
1969	361,149	181,524	227,407	59,367	200,804	33,641

Basic Table 49. Number of Women Teachers in Various Major Countries (Table 49)

Country	Elementary Schools			Secondary Schools		
	Year	Full-Time Teachers	Women Teachers	Year	Full-Time Teachers	Women Teachers
Japan	1964	339,693	163,253	1964	232,513	56,216
	1969	357,066	179,815	1969	219,275	56,241
U.S.A.	1963	908,536	775,136	1963	667,526	304,871
England & Wales	1964	144,075	107,890	1964	142,013	57,417
	1967	155,555	116,588	1967	147,972	59,156
France	1964	191,053	123,718	1964	124,314	64,207
	1967	196,624	128,503	1967	152,615	78,081
Germany (F.R.)	1964	146,336	74,376	1964	63,863	22,082
	1967	176,167	94,076	1967	80,719	27,546
U.S.S.R.	1964	760,000	646,000	1964	1,439,000	874,000
	1968	780,000	673,000	1968	1,565,000	984,000

Note: Japan; Secondary schools are lower secondary schools only.

Basic Table 50. Average Monthly Salaries of Teachers by Establishing Body and by Age-Group (1965), (Figure 33)

(Unit: yen)

School Level		Age Group				
		25~29	30~34	35~39	40~49	50~59
Kindergartens	Local Public	23,484	29,617	34,570	39,226	44,961
	Private	20,198	23,445	25,377	28,306	28,603
Elementary Schools	Local Public	28,341	36,951	44,896	54,091	71,312
Lower Secondary Schools	Local Public	28,227	36,780	45,626	54,439	70,619
Upper Secondary Schools	Local Public	29,105	38,039	48,108	58,984	77,171
	Private	28,178	35,603	42,431	47,229	44,165
Universities	National	30,306	39,449	50,513	70,414	96,443
	Private	30,989	41,983	54,502	70,051	82,562

Basic Table 51. Composition of Teaching Loads of Public School Teachers by Type of Service (Figure 34)

Type of Service	School Level		
	Elementary Schools	Lower Secondary Schools	Upper Secondary Schools
	%	%	%
Total	100.0	100.0	100.0
I. Teaching and Guidance Activities	78.6	75.7	72.7
1. Direct Teaching and Guidance Activities	(46.9)	(43.0)	(32.2)
2. Indirect Teaching and Guidance Activities	(18.7)	(21.2)	(26.5)
3. Studies	(13.0)	(11.5)	(14.0)
II. Clerical Work	6.3	7.2	8.8
III. Auxiliary Activities and Others	2.1	1.9	1.7
IV. Rest Hours and Others	13.0	15.2	16.8

Basic Table 52. Number of Teachers Who Have Certificates by Subject (1968) (Table 55)

School Level		Total	Japanese Language	Social Study	Mathematics	Science	Foreign Language
Grand Total	Total Number of Teachers	310,520	66,873	65,123	63,137	56,729	58,658
	Number of Teachers Who Have Certificates	262,889	55,611	58,961	47,105	49,733	51,479
Lower Secondary School	Number of Teachers	188,455	42,081	39,228	39,553	33,515	34,078
	Number of Teachers Who Have Certificates	149,558	32,281	34,180	26,780	28,023	28,294
Upper Secondary School	Number of Teachers	122,065	24,792	25,895	23,584	23,214	24,580
	Number of Teachers Who Have Certificates	113,331	23,330	24,781	20,325	21,710	23,185

Basic Table 53. Recruitment and Departure from the Teaching Profession (1967) (Section I–(5)–b)

Prefecture	Elementary School		Lower Secondary School		Upper Secondary School	
	Percent of Recruited Teachers	Percent of Departing Teachers	Percent of Recruited Teachers	Percent of Departing Teachers	Percent of Recruited Teachers	Percent of Departing Teachers
	%	%	%	%	%	%
Total	5.4	4.8	5.1	5.6	4.9	4.2
Hokkaido	5.1	4.7	5.2	4.8	4.8	3.8
Aomori	3.9	3.2	4.0	3.5	5.5	3.8
Iwate	3.7	4.7	5.6	5.1	5.9	4.1
Miyagi	4.8	5.1	5.6	5.7	4.8	4.2
Akita	4.5	5.6	7.0	7.1	5.0	3.3
Yamagata	3.9	6.1	4.7	6.1	4.8	3.4
Fukushima	4.0	4.3	4.4	5.1	5.1	3.9
Ibaraki	4.8	5.3	6.3	6.4	5.1	2.9
Tochigi	5.7	6.2	7.2	6.4	8.4	4.8
Gunma	4.2	5.5	6.4	7.2	4.4	4.2
Saitama	8.8	5.0	6.8	5.6	7.0	4.2
Chiba	7.8	4.9	6.9	6.6	6.7	4.0
Tokyo	5.8	3.4	1.8	3.1	4.4	4.7
Kanagawa	10.4	4.4	5.9	4.1	5.6	4.2
Niigata	4.1	4.5	5.0	4.8	7.8	3.7
Toyama	2.7	4.7	4.2	5.5	2.5	4.9
Ishikawa	3.8	5.3	6.1	6.9	4.2	4.6
Fukui	7.0	5.9	8.4	9.1	5.3	4.8
Yamanashi	4.9	5.8	7.7	6.6	4.4	3.7
Nagano	5.6	7.3	5.8	7.1	2.9	8.3
Gifu	4.6	4.4	4.2	4.3	5.3	4.0
Shizuoka	5.5	5.1	5.7	6.8	5.3	4.1
Aichi	9.6	5.8	7.5	8.6	8.8	5.5
Mie	4.6	5.3	5.1	6.5	3.8	4.1
Shiga	4.5	5.8	6.0	6.4	4.4	4.5
Kyoto	5.6	3.7	3.3	6.2	3.7	5.1
Osaka	8.4	4.2	3.9	4.1	3.3	3.4
Hyogo	6.5	4.7	5.2	5.6	4.7	4.0
Nara	5.8	5.3	6.7	7.0	5.1	4.1
Wakayama	5.4	4.6	6.2	5.5	2.3	4.2
Tottori	2.6	3.2	3.0	3.3	5.3	4.1
Shimane	5.4	7.1	5.7	8.7	2.9	4.0
Okayama	4.7	4.8	6.1	7.2	3.8	4.9
Hiroshima	4.6	3.6	5.3	5.2	4.2	4.8
Yamaguchi	2.6	4.3	3.0	4.6	3.3	5.1
Tokushima	4.9	6.0	5.6	8.4	4.0	3.6
Kagawa	7.0	7.1	6.1	8.8	3.9	4.6
Ehime	5.7	6.8	6.3	7.2	5.4	5.3
Kochi	2.5	3.6	3.2	4.1	2.7	3.6
Fukuoka	2.1	3.4	2.4	4.7	2.8	4.5
Saga	3.1	5.0	5.0	5.3	4.3	3.2
Nagasaki	2.9	4.3	4.4	4.2	6.0	3.7
Kumamoto	4.2	5.6	5.5	6.2	5.6	4.0
Oita	5.3	5.2	6.3	6.5	4.6	3.9
Miyazaki	2.8	4.2	4.5	4.4	6.8	5.0
Kagoshima	6.0	7.1	6.7	6.2	6.3	3.9

Basic Table 54. School Building Area per Pupil in Public Schools (Figure 35)

Year	Elementary School	Lower Secondary School	Upper Secondary School
	m^2	m^2	m^2
1959	3.37	4.43	4.73
1960	3.67	4.00	4.86
1961	3.97	3.67	5.19
1962	4.26	3.70	5.22
1963	4.36	3.90	5.06
1964	4.69	4.33	4.79
1965	4.86	4.76	4.76
1966	5.02	5.16	5.02
1967	5.19	5.53	5.41
1968	5.33	5.79	5.89
1969	5.34	6.09	6.44

Basic Table 55. School Building Area by Building Material in Public Schools (Figure 36)

Year	Elementary School				Lower Secondary School				Upper Secondary School			
	Total	Wood	Reinforced Concrete	Other	Total	Wood	Reinforced Concrete	Other	Total	Wood	Reinforced Concrete	Other
	%	%	%	%	%	%	%	%	%	%	%	%
1959	100.0	89.7	9.1	1.2	100.0	89.2	8.8	2.0	100.0	82.0	14.4	3.6
1964	100.0	81.0	17.3	1.7	100.0	73.2	24.3	2.5	100.0	59.4	34.8	5.8
1965	100.0	78.3	19.8	1.9	100.0	70.6	26.4	3.0	100.0	56.5	36.8	5.7
1966	100.0	74.8	23.0	2.2	100.0	67.2	29.6	3.2	100.0	50.5	41.8	7.7
1967	100.0	71.1	26.5	2.4	100.0	64.1	32.5	3.4	100.0	46.8	44.7	8.5
1968	100.0	67.0	30.3	2.7	100.0	61.1	35.0	3.9	100.0	43.3	47.5	9.2
1969	100.0	63.2	34.2	2.6	100.0	58.1	37.9	4.0	100.0	40.0	50.4	9.6

Note: The percent in 1959 is computed on the basis of the total area of school buildings, gymnasiums and dormitories.

Basic Table 56. Floor Area of University School Buildings per Student
(Figure 37)

Year	National University	Local Public University	Private University
	m^2	m^2	m^2
1959	18.28	15.47	4.24
1964	19.17	15.53	4.99
1965	19.52	15.40	5.21
1966	19.54	14.78	5.30
1967	19.54	15.31	5.56
1968	19.51	14.19	5.67

Basic Table 57. Numbers of Schools Having Gymnasiums and Swimming Pools
(Table 59)

Year	Gymnasiums				Swimming Pools			
	Elementary School		Lower Secondary School		Elementary School		Lower Secondary School	
	Having	Not Having	Having	Not Having	Having	Not Having	Having	Not Having
1959	12,010	14,671	7,019	5,441	–	–	–	–
1964	9,585	16,390	4,461	7,150	21,596	4,380	10,336	1,275
1965	9,107	16,638	3,994	7,390	20,484	5,261	9,825	1,559
1966	8,568	16,889	3,575	7,584	19,297	6,160	9,311	1,848
1967	8,082	17,174	3,134	7,869	15,518	6,829	8,215	2,355
1968	7,674	17,355	2,731	8,056	–	–	–	–
1969	7,135	17,647	2,336	8,272	16,977	7,727	7,746	2,896

Note: The dates of the surveys on gymnasiums and swimming pools are not the same.

Basic Table 58. Percent of Schools Which Have Standard Teaching Materials by Subject and School Size (1968), (Table 61)

a. Elementary School

Subjects	5 Classes	12 Classes	18 Classes	24 Classes	30 Classes	36 Classes
	%	%	%	%	%	%
Materials for All Subjects	54.1	59.3	58.9	57.6	56.0	55.0
Japanese Language	62.1	62.6	57.4	60.2	56.8	54.7
Social Studies	29.6	41.0	36.6	39.3	36.4	38.9
Arithmetic	28.9	33.3	29.4	30.2	27.3	29.3
Music	44.9	45.5	51.4	53.6	55.2	54.2
Arts & Handicrafts	17.4	22.3	27.3	18.6	20.2	22.8
Homemaking	27.0	39.7	47.9	49.5	53.3	53.5
Physical Education	35.0	57.8	52.5	54.3	48.1	51.0

b. Lower Secondary School

Subjects	5 Classes	9 Classes	15 Classes	21 Classes	27 Classes	38 Classes
	%	%	%	%	%	%
Materials for All Subjects	54.3	51.5	51.4	51.7	50.9	48.4
Japanese Language	39.1	43.1	40.2	40.5	42.2	50.3
Social Studies	34.8	36.1	32.0	34.7	32.6	34.6
Mathematics	41.4	40.9	30.3	35.5	31.1	35.2
Music	39.0	45.4	40.5	42.7	45.0	46.9
Fine Arts	15.1	17.5	22.1	17.0	18.8	19.8
Health & Physical Education	47.7	54.1	48.1	44.9	45.4	47.3
Foreign Language	35.2	45.8	35.7	44.2	42.5	45.8
Guidance for Pupil's Prospective Course	37.8	34.4	30.0	36.1	38.4	47.2

Basic Table 59. Educational Surroundings of Public Schools
(Figure 38) (October, 1969)

a. Education Surroundings

School Level	Good	Average	Bad
	schools	schools	schools
Elementary	5,661	13,463	5,615
Lower Secondary	2,675	5,307	2,621

b. Number of Schools with Bad Educational Surroundings by Cause

Year	Noise	Air Pollution	Danger on Way to School	Looseness of Public Morals in Surrounding Area
1968	875	265	1,087	262
1969	2,210	803	6,784	360

Note: Schools citing two or more factors is counted in each category cited.

Basic Table 60. Number of Scholarship Holders (1967) (Table 62)

School Level	Total	Japan Scholarship Foundation	Other Organizations				
			Local Public Bodies	Schools	Foundations (Corporations for Scholarship)	Companies (Corporations for Profit)	Private and Others
Total	409,995	311,837	48,653	12,045	23,874	4,179	9,407
Upper Secondary School	166,500	109,972	35,816	3,674	9,540	2,116	5,382
Technical College	10,954	8,337	1,151	182	766	15	503
University	211,204	178,954	9,878	7,035	11,711	1,429	2,197
Graduate School	16,385	14,349	78	730	897	258	73
Others	4,952	225	1,730	424	960	361	1,252

Basic Table 61. Number of Scholarship Holders and Total Amount of Loan (Table 63)

Year	Number of Scholarship Holders		Total Amount of Loan	
	Secondary Education	Higher Education	Secondary Education	Higher Education
			thousand yen	thousand yen
1959	97,969	131,715	1,271,323	3,666,615
1964	113,592	165,944	2,631,670	8,148,998
1965	114,136	179,595	2,657,083	9,130,808
1966	110,615	192,752	2,613,756	10,402,709
1967	109,972	201,865	2,576,178	12,692,303
1968	108,470	209,863	2,595,886	13,917,280
1969	104,553	214,120	2,616,327	14,195,292

Basic Table 62. Kind and Monthly Amount of Scholarship Loans Provided by Japan Scholarship Foundation (Table 64)

Kind of Scholarship	Monthly Amount of Loan	Number of Scholarship Holders		Notes
		Actual Number	Percent Distribution	
		persons	%	
Total		318,673	100.0	
General Scholarship Loans	yen	180,410	56.6	
Upper Secondary Education	1,500	59,654	18.7	
Higher Education		98,628	30.9	
University				University, junior college, correspondence course with institutional schooling throughout the year, teacher training course of university
Teacher Training Course	3,000			
National Training Institute for Nursing Teachers				
Correspondence Course	20,000			For the period of institutional schooling in summer.
Graduate School		17,498	5.5	
Master Course	13,000			
Doctor Course	18,000			
Art Course	8,000	13	0.0	
Technical College	1,500			Students in the 1st, 2nd & 3rd grades receive 1,500 yen per month, those in the 4th & 5th grades receive 3,000 yen.
	3,000	4,617	1.5	

(Continued)

Special Scholarship Loans		138,263	43.4	
Upper Secondary Education	3,000	44,899	14.1	
Higher Education		88,254	27.7	
University	Living at home { 5,000 / 7,500 } Living in boarding houses, etc. { 8,000 / 12,000 }			7,500 or 12,000 yen for students in private institution.
Teacher Training Course	Living at home { 5,000 / 7,500 } Living in boarding houses, etc. { 8,000 / 12,000 }			7,500 or 12,000 yen for students in the teacher training courses of private institutions designated by the Minister of Education.
Technical College	Living at home { 3,000 / 5,000 } Living in boarding houses, etc. { 4,500 / 8,000 }	5,110	1.6	Students in the 1st, 2nd & 3rd grades receive 3,000 yen or 4,500 yen, those in the 4th & 5th grades receive 5,000 or 8,000 yen.

Basic Table 63. Number of Schools, Pupils and Teacher in Isolated Areas
(Table 67)

Year	Elementary School			Lower Secondary School		
	Number of Schools	Number of Pupils	Number of Teachers	Number of Schools	Number of Pupils	Number of Teachers
1964	6,241	627,562	32,835	2,460	300,611	17,093
1965	6,064	584,310	32,398	2,361	278,927	17,363
1966	5,952	547,931	32,382	2,246	259,933	17,136
1967	5,852	511,936	31,910	2,192	248,092	17,062
1968	5,710	476,298	30,926	2,085	229,762	16,492
1969	5,541	439,452	30,160	1,997	213,279	16,218
1970	5,354	406,565	29,469	1,897	194,174	15,425

Chapter 4. Sources and Allocation of Educational Expenditures

Basic Table 64. Grand Total Education Expenditures, Public and Private Education Expenditures, Public Education Expenditures, Gross National Product (GNP) and National Income (Figure 39)

Year	Grand Total Education Expenditures	Public and Private Education Expenditures	Public Education Expenditures	GNP	National Income
	million yen	million yen	million yen	100 million yen	100 million yen
1955	604,357	437,350	372,429	88,646	72,985
1956	640,887	471,414	396,334	99,509	81,734
1957	729,676	528,640	443,280	112,489	93,547
1958	792,630	581,026	482,611	117,850	96,161
1959	818,591	633,956	521,997	136,089	110,233
1960	1,003,962	752,209	613,519	162,070	132,691
1961	1,186,401	909,396	746,395	198,528	157,551
1962	1,412,890	1,107,570	897,935	216,595	177,298
1963	1,571,518	1,331,757	1,056,702	255,759	206,072
1964	1,927,789	1,547,674	1,219,444	295,305	233,293
1965	2,219,946	1,788,199	1,384,803	326,504	259,551
1966	2,472,199	2,040,053	1,578,471	381,179	302,948
1967	2,749,361	2,291,851	1,780,914	447,668	357,081
1968	3,109,876	2,593,004	2,032,458	527,803	421,430

Basic Table 65. National Income and Public Education Expenditures in Various Major Countries (Figures 40, 41)

Country	Year	Public Education Expenditures(1)	National Income(2)	(1)/(2)	National Income per Capita		
					in Current Prices	in Constant Prices	in Yen (Constant Prices)
		million yen	100 million yen	%	yen	yen	yen
Japan	1950	159,818	33,815	4.7	40,643	83,318	83,318
	1955	372,429	72,985	5.1	81,797	125,149	125,149
	1960	613,519	132,691	4.6	142,084	200,338	200,338
	1965	1,384,803	259,551	5.3	264,284	298,641	298,641
	1967	1,780,914	357,081	5.0	356,489	370,749	370,749
	1968	2,032,458	421,430	4.8	415,845	415,845	415,845
		million dollars	million dollars	%	dollars	dollars	yen
U.S.A.	1949	6,663	217,690	3.1	1.458	2,114	761,040
	1955	13,800	330,206	4.2	2.000	2,600	936,000
	1959	20,400	400,481	5.1	2,261	2,645	952,200
	1965	33,600	562,400	6.0	2,902	3,105	1,117,800
	1967	38,400	652,900	5.9	3,285	3,416	1,229,760
	1968	43,500	712,800	6.1	3,572	3,572	1,285,920
		million pounds	million pounds	%	pounds	pounds	yen
U.K.	1950	418	10,784	3.9	403	214	348,278
	1955	615	15,517	4.0	454	305	392,170
	1960	1,018	20,861	4.9	518	398	440,379
	1965	1,646	28,667	5.7	591	527	510,278
	1966	1,824	30,069	6.1	594	550	513,389
	1968	–	31,657	–	605	576	522,374
		million francs	100 million francs	%	francs	francs	yen
France	1950	–	–	–	–	–	–
	1955	3,242	1,328	2.4	3,080	4,220	311,014
	1961	7,194	2,270	3.2	5,005	6,356	468,437
	1965	15,693	3,468	4.5	7,121	7,833	577,292
	1967	18,543	4,019	4.6	8,095	8,500	626,450
	1968	20,520	4,288	4.8	8,562	8,562	631,019
		million marks	100 million marks	%	marks	marks	yen
Germany (F.R.)	1950	2,495	752	3.3	1,602	2,371	213,386
	1955	6,181	1,392	4.4	2,834	3,798	341,780
	1959	9,354	1,940	4.8	3,757	4,659	419,281
	1965	15,404	3,454	4.5	5,854	6,030	542,666
	1967	18,513	3,637	5.1	6,116	6,238	561,449
	1968	–	–	–	–	–	–

Note: Germany (F.R.); Public education expenditures for 1950, 1955 and 1959 include expenditures for fine arts, adult education and religious activities.

France; Public education expenditures include only expenditures by the national government. Those for 1967 and 1968 include only the amounts of the original Ministry of Education budgets.

Basic Table 66. Public and Private Education Expenditures and National Income in Japan and U.S.A. (Table 68)

Country	Year	Public and Private Education Expenditures	National Income
		million yen	100 million yen
Japan	1950	173,939	33,815
	1955	437,350	72,985
	1960	752,209	132,691
	1965	1,788,199	259,551
	1968	2,593,004	421,430
		100 million dollars	100 million dollars
U.S.A.	1955	168	3,302
	1961	320	4,278
	1965	492	5,624

Basic Table 67. Public Education Expenditures, National Income, Total Governmental Expenditure (Table 69)

Year	Public Education Expenditures	National Income	Total Governmental Expenditures
	100 million yen	100 million yen	100 million yen
1950	1,598	33,815	9,146
1955	3,724	72,985	17,242
1960	6,135	132,691	29,096
1965	13,848	259,551	62,359
1966	15,785	302,948	74,200
1967	17,809	357,081	84,513
1968	20,325	421,430	98,987

Basic Table 68. Educational and Other Expenditures by Local Governments

Year	Percent						Indices (1955=100)				
	Total	Education	Public Construction	Industry & Commerce	Social & Labour Facilities	Other	Total	Education	Public Construction	Industry & Commerce	Social & Labour Facilities
	%	%	%	%	%	%					
1955	100.0	27.6	12.4	10.6	11.0	38.4	100	100	100	100	100
1956	100.0	27.9	12.7	10.6	10.6	38.2	106	107	108	105	102
1957	100.0	28.1	14.4	10.4	10.1	37.0	117	119	136	115	108
1958	100.0	28.2	14.8	10.8	10.2	36.0	128	131	153	131	119
1959	100.0	27.2	16.0	11.1	10.6	35.1	143	141	185	150	138
1960	100.0	27.1	17.2	11.5	9.6	34.6	169	166	235	185	148
1961	100.0	26.4	18.6	11.4	9.7	33.9	210	201	316	227	185
1962	100.0	26.4	19.5	11.5	9.7	32.9	254	243	401	277	224
1963	100.0	26.3	18.6	11.8	9.6	33.7	292	278	438	326	254
1964	100.0	26.0	20.5	12.9	9.1	31.5	337	317	558	410	280
1965	100.0	25.5	20.6	12.9	9.1	31.9	386	357	641	471	320
1966	100.0	24.9	20.9	13.4	9.0	31.8	446	402	753	566	367
1967	100.0	24.8	21.0	13.7	9.3	31.2	508	456	862	657	432

Note: (1) The table shows the percentages and indices of the net total amounts of expenditures by prefectures and municipalities.
(2) "Others" include expenditures for parliaments, general affairs, health, police, fire-prevention, etc.
(3) The amounts of educational expenditures do not coincide with those in the preceeding table, because the amounts in the two table were gained from independent sources.

Basic Table 69. Public Education Expenditures, National Income and Total Governmental Expenditures in Various Major Countries (Table 70)

Country	Year	Amounts in:	Public Educational Expenditures	National Income	Total Governmental Expenditures	
					Including Self-Defense Expenditures	Excluding Self-Defense Expenditures
Japan	1963	100 million	10,567	206,072	49,210	46,531
	1967	yen	17,809	357,081	84,513	80,487
U.S.A.	1963	100 million	272	4,843	1,861	1,319
	1966	dollars	365	6,167	2,578	1,873
U.K.	1964	100 million	15	269	111	92
	1966	pounds	18	301	136	115
France	1963	100 million	128	3,001	908	722
	1967	francs	185	4,019	1,138	880
Germany (F.R.)	1963	100 million	117	2,890	1,221	1,027
	1966	marks	174	3,637	1,547	1,349
U.S.S.R.	1963	100 million	137	1,688	870	731
	1967	rubles	201	2,255	1,152	1,007

Basic Table 70. Public and Private Education Expenditures by Field (Table 71)

(In million yen)

Year	Total	School Education	Social Education	Miscellaneous Schools	Educational Administration
1950	173,939	150,991	5,200	2,397	15,351
1955	437,350	398,067	7,785	9,415	22,083
1960	752,209	683,383	14,937	19,339	34,550
1965	1,788,199	1,605,232	40,939	51,855	90,173
1966	2,040,053	1,821,043	51,284	63,039	104,687
1967	2,291,851	2,043,436	60,196	72,039	116,180
1968	2,593,004	2,308,050	69,808	82,686	132,460

Basic Table 71. Public and Private School Education Expenditures by Level (Table 72)

(In million yen)

Year	Grand Total	Pre-School Education	Compulsory Education			Upper Secondary Education	Higher Education
			Total	Elementary	Lower Secondary		
1950	150,991	1,304	105,518	56,909	48,609	19,358	24,811
1955	398,067	8,165	260,586	164,763	95,823	63,965	65,351
1960	683,382	12,017	422,749	257,304	165,445	124,644	123,972
1965	1,605,232	35,022	847,525	526,832	320,693	354,459	368,226
1966	1,821,043	43,416	954,523	601,483	353,040	381,128	441,976
1967	2,043,436	53,090	1,075,022	683,761	391,261	410,868	504,456
1968	2,308,050	62,457	1,222,808	788,033	434,775	460,947	561,838

Note: "Higher Education" expenditures are expenditures for universities and junior colleges, including expenditures for attached research institutes and hospitals. In all the succeeding tables, "School Education Expenditures" include expenditures for such research institutes and hospitals.

Basic Table 72. Public School Education Expenditures by Level in Various Major Countries (Table 73, 74)

Country	Year	Total	Elementary Education Expenditures	Secondary Education Expenditures	Higher Education Expenditures	National Income
		million yen	million yen	million yen	million yen	100 million yen
Japan	1956	379,402	175,845	159,888	43,669	81,734
	1962	736,121	336,913	289,308	109,900	177,298
	1967	1,623,397	679,844	683,745	259,808	357,081
	1968	1,842,284	783,114	770,006	289,164	421,430
		million dollars	million dollars		million dollars	100 million dollars
U.S.A.	1963	28,500	21,700		6,800	4,785
	1967	43,500	31,700		11,800	6,529
	1968	49,300	35,700		13,600	7,128
		million pounds	million pounds		million pounds	million pounds
England & Wales	1956	437	355		82	16,465
	1963	946	780		166	24,900
	1967	1,428	1,101		327	31,657
		million marks	million marks	million marks	million marks	billion marks
Germany (F.R.)	1961	9,831	4,711	3,319	1,801	241
	1966	15,624	6,304	5,481	3,839	365
		million rubles	million rubles		million rubles	billion rubles
U.S.S.R.	1962	7,829	6,543		1,286	159
	1967	10,687	8,936		1,751	226
	1968	11,028	9,111		1,917	243

Note: (1) The figures for the U.S.A. in 1956 and for Germany (F.R.) in 1954 were adapted from the "Educational Standards in Japan" (1959 edition).
(2) The 'Elementary and Secondary" education expenditures for the U.S.S.R. in 1962 include expenditures for kindergartens.

Basic Table 73. School Education Expenditures by Purpose, Level and Type of Establishing Body (Table 75–77, 80, 81)

		Year	Total	Recurrent Expenditures		Capital Outlay	Debt Service
				Teachers' Salaries	Others		
Pre-School Education	Public	1935	1,623	1,136	324	163	–
		1950	516,697	281,130	144,932	90,635	–
		1955	2,145,217	1,220,577	479,929	443,519	1,192
		1960	3,420,365	2,167,406	670,732	578,147	4,080
		1965	9,627,830	6,373,696	1,149,650	2,068,229	36,255
		1968	17,278,245	9,632,514	2,801,144	4,631,131	213,456
	Private	1935	2,321	1,269	795	257	–
		1950	787,307	427,123	138,936	221,248	–
		1955	6,019,388	2,164,180	1,421,918	1,970,298	462,992
		1960	8,596,811	3,294,662	2,425,880	1,995,813	880,456
		1965	25,394,027	9,940,383	6,390,287	7,121,691	1,941,666
		1968	45,178,938	18,851,731	11,454,562	11,097,200	3,775,445
Compulsory Education (Public and Private)		1935	321,200	210,213	34,636	76,351	–
		1950	105,517,975	56,653,872	18,687,359	30,176,744	–
		1955	260,585,127	157,964,753	47,979,148	50,735,895	3,905,331
		1960	422,748,830	251,374,551	69,500,280	91,415,374	10,458,625
		1965	847,524,642	504,759,217	164,972,956	158,308,189	19,484,280
		1968	1,222,807,446	702,289,573	241,017,135	246,477,601	33,023,137
Upper Secondary Education	Public	1935	79,262	53,455	11,963	13,844	–
		1950	18,225,625	12,584,712	2,282,347	3,358,566	–
		1955	56,510,977	37,913,242	8,866,405	9,423,632	307,698
		1960	96,215,006	59,652,812	15,211,486	20,514,671	836,037
		1965	248,039,487	140,249,468	41,085,153	61,452,710	5,252,156
		1968	348,791,780	188,737,044	70,429,908	81,984,539	7,640,289
	Private	1935	21,370	12,483	5,709	3,178	–
		1950	1,132,518	605,202	293,661	233,655	–
		1955	7,454,096	3,340,693	1,592,258	2,077,898	443,247
		1960	28,429,323	9,299,348	5,796,275	9,983,431	3,350,269
		1965	106,419,101	35,321,305	15,458,205	34,493,346	21,146,245
		1968	112,155,261	48,685,726	19,139,182	24,475,549	19,854,804

(Continued)

		Year	Total	Recurrent Expenditures		Capital Outlay	Debt Service
				Teachers' Salaries	Others		
Higher Education	National	1935	38,014	31,485		6,529	–
		1950	10,032,736	5,129,161	1,506,947	3,396,628	–
		1955	25,196,701	16,753,963	3,081,204	5,361,534	–
		1960	41,578,720	25,659,674	5,581,546	10,337,500	–
		1965	129,054,952	51,952,676	29,351,944	47,750,332	–
		1968	186,890,126	78,287,405	38,762,406	69,840,315	–
	Local Public	1935	3,026	1,650	971	405	–
		1950	2,472,030	971,468	841,077	659,485	–
		1955	4,396,839	3,221,638	906,878	268,323	–
		1960	8,240,122	5,020,924	1,571,816	1,647,382	–
		1965	16,465,817	9,619,274	2,311,716	4,532,627	2,200
		1968	24,315,503	12,280,282	5,078,467	6,948,464	8,290
	Private	1935	22,908	9,421	10,750	2,737	–
		1950	7,309,028	3,378,556	2,236,998	1,693,474	–
		1955	22,010,908	8,622,508	6,391,654	5,019,600	1,977,146
		1960	48,054,382	15,326,987	13,805,096	13,783,957	5,138,342
		1965	143,821,014	42,823,343	22,240,769	57,976,138	20,780,764
		1968	232,234,789	71,101,127	49,572,606	74,081,234	37,479,822

Note: Expenditures for all national schools are included in "Higher Education".

Basic Table 74. Public School Education Expenditures per Pupil and National Income per Capita in Various Major Countries (Table 78)

Country	Year	Amounts in:	National Income per Capita	Elementary & Secondary Education Expenditures per Capita	Higher Education Expenditures per Student
Japan	1963	yen	214,410	42,574	351,313
	1967		356,489	76,788	498,261
U.S.A.	1963	dollars	2,544	529	2,388
	1967		3,285	723	2,602
Britain	1963	pounds	464	110	1,162
	1967		550	151	1,449
Germany (F.R.)	1963	marks	5,019	935	8,096
	1967		6,116	1,237	11,417
U.S.S.R.	1963	rubles	757	145	987
	1967		962	168	926

Note: The numbers of elementary & secondary education expenditures in Britain is those of England & Wales only.

Basic Table 75. Education Expenditures per Pupil in Compulsory Schools by Prefecture, 1968 (Table 79)

a. Elementary Schools

Prefectures	Amounts	Ranking
	yen	
Hokkaido	82,832	16
Aomori	75,575	29
Iwate	83,398	15
Miyagi	70,314	40
Akita	78,071	24
Yamagata	82,378	17
Fukushima	73,102	36
Ibaraki	74,727	33
Tochigi	70,177	41
Gunma	69,730	44
Saitama	81,012	20
Chiba	77,252	26
Tokyo	111,674	1
Kanagawa	75,326	30
Niigata	90,013	8
Toyama	91,661	5
Ishikawa	87,677	11
Fukui	86,659	13
Yamanashi	70,869	38
Nagano	88,792	9
Gifu	73,645	35
Shizuoka	70,885	37
Aichi	76,271	28
Mie	74,579	34
Shiga	87,777	10
Kyoto	93,815	2
Osaka	81,749	18
Hyogo	77,331	25
Nara	92,590	4
Wakayama	85,568	14
Tottori	90,484	6
Shimane	90,172	7
Okayama	87,331	12
Hiroshima	78,785	23
Yamaguchi	75,144	31
Tokushima	81,565	19
Kagawa	79,466	21
Ehime	74,849	32
Kochi	93,792	3
Fukuoka	76,355	27
Saga	69,880	43
Nagasaki	66,106	46
Kumamoto	70,344	39
Oita	79,364	22
Miyazaki	70,019	42
Kagoshima	68,391	45

b. Lower Secondary Schools

Prefectures	Amounts	Ranking
	yen	
Hokkaido	89,752	11
Aomori	79,256	37
Iwate	82,524	27
Miyagi	73,364	46
Akita	85,604	18
Yamagata	88,000	17
Fukushima	75,171	43
Ibaraki	83,020	25
Tochigi	75,965	42
Gunma	81,353	31
Saitama	79,748	33
Chiba	94,920	4
Tokyo	117,787	1
Kanagawa	88,027	16
Niigata	84,273	24
Toyama	79,176	38
Ishikawa	90,124	10
Fukui	81,688	30
Yamanashi	85,082	20
Nagano	92,469	7
Gifu	88,093	15
Shizuoka	79,525	35
Aichi	84,941	21
Mie	88,871	14
Shiga	82,855	26
Kyoto	96,185	3
Osaka	90,194	9
Hyogo	93,680	6
Nara	80,683	32
Wakayama	94,421	5
Tottori	82,204	29
Shimane	89,462	12
Okayama	88,903	13
Hiroshima	84,843	22
Yamaguchi	84,796	23
Tokushima	85,332	19
Kagawa	82,472	28
Ehime	91,371	8
Kochi	106,921	2
Fukuoka	79,362	36
Saga	79,556	34
Nagasaki	73,599	45
Kumamoto	74,105	44
Oita	78,187	40
Miyazaki	78,540	39
Kagoshima	76,108	41

Basic Table 76. Social Education Expenditures by Major Purpose (Table 82)

(In thousand yen)

Year	Total	Recurrent Expenditures	Capital Outlay	Dept Services
1950	5,199,634	3,438,454	1,752,088	9,092
1955	7,785,350	5,402,536	2,353,459	29,355
1960	14,937,400	8,859,102	6,033,462	44,836
1965	40,939,274	21,767,732	18,359,538	812,004
1968	69,807,527	34,545,092	32,983,619	2,278,816

Basic Table 77. Public School Education Expenditures by at Level and Major Purpose in Various Major Countries (Table 83)

Educational Level	Country	Year	Amounts in:	Total	Recurrent Expenditures			Capital Outlay	Dept Service
					Total	Teachers' Salaries	Others		
Elementary and Secondary	Japan	1968	million yen	1,551,464	1,188,400	776,239	412,161	324,382	38,682
	U.S.A.	1968	million dollars	35,511	29,842	–	–	4,654	1,015
	England & Wales	1967	million pounds	1,161	892	–	–	163	106
	Germany (F.R.)	1966	million marks	11,785	–	–	–	–	–
Higher	Japan	1968	million yen	211,206	134,409	90,568	43,841	76,789	8
	U.S.A.	1965	million dollars	15,699	12,570	3,782	8,788	3,129	–
	Britain	1966	million pounds	268	184	98	86	81	3
	Germany (F.R.)	1966	million marks	3,839	2,693	1,491	1,202	1,146	–

Note: Elementary and secondary education expenditures for Germany (F.R.) include expenditures for vocational schools. "Capital Outlays" are the amounts of investments.

Basic Table 78. Public Educational Expenditures by Source (Table 84)

Year	Total	Expenditures Borne by the National Government				Expenditures Borne by Local Governments		
		Total	Direct Expenditures	Subsidies	Allocation or Tax Grants to Local Authorities	Total	Prefectures	Municipalities
1950	159,818	82,528	16,322	5,901	60,305	77,290	41,941	35,349
1955	372,429	173,757	41,815	84,853	47,089	198,672	113,666	85,006
1960	613,519	293,063	71,017	137,937	84,109	320,456	185,557	134,899
1965	1,384,803	692,693	202,421	297,044	193,228	692,110	407,075	285,035
1968	2,032,458	1,006,273	310,109	414,787	281,377	1,026,185	620,314	405,871

Basic Table 79. Public Educational Expenditures by Source in Various Major Countries (Table 85)

Country	Year	Amounts in:	Total	Expenditures Borne by the National Government			Expenditures Bone by Local Governments (Prefectures, Municipalities)
				Total	Federal	State	
Japan	1962	million yen	897,935	434,680	–	–	463,255
	1967		1,780,914	887,427	–	–	893,487
	1968		2,032,458	1,006,273	–	–	1,026,185
U.S.A.	1959	million dollars	20,350	9,289	1,827	7,462	11,061
	1967		38,400	20,500	4,500	16,000	17,900
	1968		43,500	23,500	5,300	18,200	20,000
Germany (F.R.)(1)	1962	million marks	10,284	7,335	1,009	6,326	2,949
	1966		17,373	12,808	1,712	11,096	4,565
	1967		18,513	14,139	2,141	11,998	4,374

Note: (1) The figures for Germany (F.R.) include expenditures for federal and state research institutes, libraries for atomic research, and museums, in addition to expenditures for elementary, secondary and higher education (including hospitals attached to universities).

Basic Table 80. School Education Expenditures by Source 1968 (Table 86)

(In million yen)

Education Level	National		Local Public				
	Expenditures by National Government	(Tuition Fees, etc.)	Total	National Subsidies	Expenditures by Local Government	Donations	(Tuition Fees, etc.)
Pre-primary	–	–	17,279	436	16,021	822	(3,133)
Compulsory	–	–	1,204,327	398,400	791,233	14,694	–
Upper Secondary	–	–	348,792	10,010	316,271	22,511	(27,469)
Higher	186,890	(5,636)	24,316	179	24,115	22	(1,732)

Education Level	Private							
	Total	National Subsidies	Local Subsidies	Expenditures by Establishing Bodies (Legal Persons)	Donations	Loans	(Beneficiaries' Contributions) (Tuition Fees, etc.)	(Others)
Pre-Primary	45,179	129	370	37,481	1,223	5,976	(33,905)	(37,829)
Compulsory	18,479	70	460	13,675	1,748	2,526	(10,856)	(13,629)
Upper Secondary	112,155	753	4,540	81,080	5,830	19,952	(64,250)	(81,430)
Higher	232,235	7,164	321	157,346	20,511	46,893	(111,377)	(153,221)

Note: (1) Local allocation tax grants are included in "Expenditures by Local Governments".
(2) Expenditures for all national institutions whether pre-primary, conpulsory or upper secondary education are included in "Higher Education".
(3) "Tuition Fees, etc." and "Other Beneficiaries' Contributions" are already included in "Expenditures by National Government", "Expenditures by Local Governments" and "Expenditures by Establishing Body (Legal Persons)." The figures for "Tuition Fees, etc." and "Other Beneficiaries' Contributions" shown in the table were calculated from data gained by independent surveys.

Basic Table 81. School Education Expenditures by Source in Various Mator Countries (Table 87)

a. Local Public Elementary and Secondary Schools

Country	Year	Amounts in:	Total	Expenditures Borne by National Government		Expenditures Borne by Local Governments	Beneficiaries' Contributions (Tuition Fees,etc.)	Donations, etc.
				Federal	State			
Japan	1965	million	1,081,638	292,642		722,833	26,664	39,499
	1968	yen	1,553,120	408,411		1,080,035	27,469	37,205
U.S.A.(1)	1965	million	26,500	2,000	9,600	14,800	100	
	1968	dollars	35,700	2,900	13,300	19,400	100	
Germany (F.R.)	1959	million	6,598	1	3,984	2,613	–	–
	1966	marks	11,784	93	7,247	4,444	–	–

b. Local Public Institutions of Higher Education

Country	Year	Amounts in:	Total	Expenditures Borne by National Government		Expenditures Borne by Local Governments	Beneficiaries' Contributions (Tuition Fees, etc.)	Donation, etc.
				Federal	State			
Japan	1965	million	145,521	125,491		15,103	4,903	24
	1968	yen	211,265	187,069		16,746	7,368	22
U.S.A.	1963	million	6,800	1,200	2,700	300	2,600	
	1968	dollars	12,200	2,500	4,500	500	4,700	
Germany (F.R.)	1964	million	2,110	308	1,605	–	79	119
	1966	marks	3,839	585	3,254(2)	–	–	–

c. Private Institutions of Higher Education

Country	Year	Amounts in:	Total	Expenditures Borne by National Government		Expenditures Borne by Local Governments	Beneficiaries' Contributions (Tuition Fees, etc.)	Donation, etc.
				Federal	State			
Japan	1965	million	143,821	2,858		112	60,982	79,869
	1968	yen	232,235	7,164		321	111,337	113,413
U.S.A.	1963	million	5,000	1,200	100	–	3,700	
	1968	dollars	8,200	2,600	100	–	5,500	
Britain	1964	million	187	162		2	10	13
	1966	pounds	268	235		2	13	18

Note: (1) Includes expenditures for kindergartens.
(2) Includes beneficiaries' contributions and donations, etc.

Basic Table 82. Social Education Expenditures by Source (Table 88)

(In thousand yen)

Year	Total	National Subsidies	Expenditures by Local Governments	Donations, etc.
1950	5,199,634	244,242	4,675,869	279,523
1955	7,785,350	198,179	7,480,644	106,527
1960	14,937,400	458,033	14,348,933	130,434
1965	40,939,274	1,484,414	39,400,304	54,556
1968	69,807,527	3,272,378	66,447,136	88,013

Basic Table 83. Index of Recurrent Educational Expenditures Per Student with Beneficiaries' Contributions as the base (Figure 42)

(In yen)

Educational Level	Year	Public Schools (1)			Private Schools		
		Recurrent Expenditures (A)	Tuition Fees,etc. (B)	Index (A/B)	Recurrent Expenditures (A)	Tuition Fees, etc. (B)	Index (A/B)
Pre-Primary Education	1935	23	12	1.9	26	18	1.4
	1950	3,959	1,272	3.1	4,961	6,213	0.8
	1955	7,145	3,402	2.1	8,905	7,836	1.1
	1960	12,445	4,433	2.8	11,197	9,778	1.1
	1965	25,305	6,946	3.6	19,512	22,542	0.9
	1968	35,377	8,914	4.0	28,484	31,866	0.9
Upper Secondary Education	1935	67	40	1.7	63	57	1.1
	1950	9,118	2,497	3.7	2,997	3,140	1.0
	1955	22,575	4,537	5.0	9,639	13,612	0.7
	1960	32,542	5,911	5.5	16,245	19,649	0.8
	1965	53,375	7,849	6.8	30,494	38,030	0.8
	1968	82,646	8,760	9.4	49,345	46,744	1.1
Higher Education	1935	455	97	4.7	178	115	1.5
	1950	43,365	3,127	13.9	24,271	17,791	1.4
	1955	101,390	6,552	15.5	39,769	26,478	1.5
	1960	155,179	10,657	14.6	62,035	40,782	1.5
	1965	308,649	13,931	22.2	82,230	77,071	1.1
	1968	354,543	17,072	20.8	103,437	95,434	1.1

Note: (1) Figures for pre-primary and upper secondary education show expenditures for local public schools, while those for higher education are expenditures for national institutions.

Basic Table 84. Beneficiaries' Contributions per Student in Higher Education Institutions and Personal Consumption Expenditure per Capita in Various Major Countries (Figure 43, Table 89)

(In yen)

Country	Year	Tuition Fees, etc. per Student		Consumption Expenditure per Capita
		Public	Private	
Japan	1950	6,880	36,472	59,069
	1956	15,737	42,869	99,156
	1960	16,845	57,503	136,867
	1965	17,410	87,090	212,508
	1968	18,490	95,434	271,141
U.S.A.	1955	63,720	207,720	649,142
	1959	75,240	252,000	695,876
	1965	214,200	547,920	836,636
Britain	1950	–	76,585	292,464
	1955	–	64,517	323,222
	1960	–	65,887	357,091
	1965	–	65,588	400,032
	1966	–	62,433	406,771
Germany (F.R.)	1950	27,306	–	178,155
	1955	28,664	–	262,802
	1960	27,267	–	314,612
	1964	26,955	–	400,319

Note: All figures are shown in yen of 1968 value.

Basic Table 85. Index of Recurrent Expenditures in Higher Education with Beneficiaries' Contributions as the Base, in Various Major Countries (Figure 44)

(In yen)

Country	Year	Amounts in:	National and Local Public			Private		
			Recurrent Expenditures (A)	Tuition Fees, etc. (B)	Index (A/B)	Recurrent Expenditures (A)	Tuition Fees, etc. (B)	Index (A/B)
Japan	1935	thousand yen	34,106	7,321	4.7	20,171	12,944	1.6
	1950		8,448,653	582,510	14.5	5,615,554	4,116,248	1.4
	1956		25,371,678	2,537,383	10.0	17,172,370	11,581,589	1.5
	1960		37,833,960	2,891,412	13.1	29,132,083	19,151,431	1.5
	1965		93,235,610	4,902,875	19.0	65,064,112	60,982,433	1.1
	1968		134,408,560	7,368,027	18.2	120,673,733	111,336,880	1.1
U.S.A.	1937	thousand dollars	231,641	46,962	4.9	308,651	132,035	2.3
	1947		1,153,520	102,163	11.3	1,092,133	292,446	3.7
	1955		1,936,390	203,007	9.5	1,563,073	522,918	3.0
	1959		2,999,537	331,956	9.0	1,976,906	829,798	2.4
	1963		5,109,000	582,865	8.8	4,088,500	1,316,589	3.1
Britain	1935	thousand pounds	–	–	–	7,300	1,806	4.0
	1950		–	–	–	24,000	4,023	6.0
	1955		–	–	–	37,600	4,270	8.8
	1960		–	–	–	67,800	6,318	10.7
	1964		–	–	–	122,400	10,041	12.2
	1966		–	–	–	184,000	13,354	13.7
Germany (F.R.)	1950	thousand marks	179,533	25,609	7.0	–	–	–
	1955		348,056	36,809	9.5	–	–	–
	1960		749,154	53,757	13.9	–	–	–
	1964		1,305,300	78,700	16.6	–	–	–

Basic Table 86. School Education Expenditures per Pupil Paid by Parents in Local Public Elementary, Lower Secondary and Upper Secondary Schools (Figure 45, Table 90)

(In yen)

Year	Elementary Schools	Lower Secondary Schools	Upper Secondary Schools (full-time)
1954	5,992	7,873	22,198
1955	6,509	8,111	24,345
1956	6,302	8,122	25,380
1957	7,837	9,031	27,965
1958	8,021	9,476	28,893
1959	7,962	10,301	30,519
1960	9,236	11,328	31,159
1961	9,268	13,579	32,981
1962	10,476	13,959	37,077
1963	11,396	15,015	39,143
1964	13,070	16,788	40,540
1965	15,536	20,027	44,313
1966	15,285	20,710	49,389
1967	17,520	23,446	51,270
1968	20,455	27,520	55,834

Basic Table 87. Student Expenses per Student in Universities and Junior Colleges (Figure 46, Table 91)

(In yen)

Year	Universities			Junior Colleges		
	National	Local Public	Private	National	Local Public	Private
1955	22,944	30,373	41,064	–	–	–
1961	32,122	37,394	62,850	–	–	–
1963	38,454	42,609	78,409	–	–	–
1965	43,492	45,604	100,352	34,670	45,510	89,120
1966	47,200	53,700	118,900	–	–	–
1968	58,200	66,300	144,100	51,700	63,900	134,900

APPENDIX B. LIST OF SOURCES

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